H 780-13

102d Congress, 1st Session - - - - - - - - - - - House Document 102-89

vi + 62 p ill.
68p.

1991 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL HOSPITAL INSURANCE TRUST FUND

COMMUNICATION

FROM

THE BOARD OF TRUSTEES, FEDERAL HOSPITAL INSURANCE TRUST FUND

TRANSMITTING

THE 1991 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL HOSPITAL INSURANCE TRUST FUND, PURSUANT TO 42 U.S.C. 1817(b)(2)

996-A;
996-B

Y1.1/7:102-89.

MAY 22, 1991.—Referred to the Committee on Ways and Means and ordered to be printed

---

U.S. GOVERNMENT PRINTING OFFICE

49-011 WASHINGTON : 1991

6/5

1991 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL HOSPITAL INSURANCE TRUST FUND

COMMUNICATION

FROM

THE BOARD OF TRUSTEES, FEDERAL HOSPITAL INSURANCE TRUST FUND

TRANSMITTING

THE 1991 ANNUAL REPORT OF THE BOARD, PURSUANT TO SECTION 1817(b) OF THE SOCIAL SECURITY ACT, AS AMENDED

LETTER OF TRANSMITTAL

BOARD OF TRUSTEES OF THE
FEDERAL HOSPITAL INSURANCE TRUST FUND
Washington, D.C., May 17, 1991

HONORABLE THOMAS S. FOLEY
Speaker of the House of Representatives
Washington, D.C.

HONORABLE DAN QUAYLE
President of the Senate
Washington, D.C.

GENTLEMEN: We have the honor of transmitting to you the 1991 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund (the 26th such report), in compliance with the provisions of section 1817(b) of the Social Security Act.

Respectfully,

NICHOLAS F. BRADY,
Secretary of the Treasury, and
Managing Trustee of the Trust Fund

LYNN MARTIN,
Secretary of Labor, and Trustee

LOUIS W. SULLIVAN, M.D.,
Secretary of Health and
Human Services, and Trustee

STANFORD G. ROSS,
Trustee

DAVID M. WALKER,
Trustee

GAIL R. WILENSKY, Ph.D.,
Administrator of the Health Care
Financing Administration,
and Secretary, Board of Trustees

CONTENTS

EXECUTIVE SUMMARY 1

THE BOARD OF TRUSTEES 11

SOCIAL SECURITY AMENDMENTS SINCE THE 1990 REPORT 12

NATURE OF THE TRUST FUND 14

SUMMARY OF THE OPERATIONS OF THE TRUST FUND, FISCAL YEAR 1990 19

EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND DURING THE PERIOD OCTOBER 1, 1990 TO DECEMBER 31, 1993 24

ACTUARIAL STATUS OF THE TRUST FUND 29

CONCLUSION 39

APPENDIX A
ACTUARIAL METHODOLOGY AND PRINCIPAL ASSUMPTIONS FOR THE HOSPITAL INSURANCE COST ESTIMATES 41

APPENDIX B
ACTUARIAL BALANCE UNDER THE MODIFIED AVERAGE-COST METHOD 52

APPENDIX C
ANNOUNCEMENT OF THE MEDICARE PART A (HOSPITAL INSURANCE) INPATIENT HOSPITAL DEDUCTIBLE AND HOSPITAL AND SKILLED NURSING FACILITY COINSURANCE AMOUNTS, FOR CALENDAR YEAR 1991 54

APPENDIX D
ANNOUNCEMENT OF THE MEDICARE PART A (HOSPITAL INSURANCE) MONTHLY PREMIUM RATE FOR THE UNINSURED AGED, FOR CALENDAR YEAR 1991 57

APPENDIX E
STATEMENT OF ACTUARIAL OPINION 60

APPENDIX F
STATEMENT OF PUBLIC TRUSTEES ON QUALIFIED ACTUARIAL OPINION IN THE HOSPITAL INSURANCE (HI) REPORT 61

TABLES

I Contribution Rates and Maximum Taxable Amount of Annual Earnings . . 2
II Actuarial Balances of the Hospital Insurance Program, Under Alternative Sets of Assumptions 6
III Status of the Hospital Insurance Trust Fund 7
IV Change in the 75-Year Actuarial Balance Since the 1990 Report . . . 9

1 Contribution Rates and Maximum Taxable Amount of Annual Earnings . . 18
2 Statement of Operations of the Hospital Insurance Trust Fund During Fiscal Year 1990 21
3 Comparison of Actual and Estimated Operations of the Hospital Insurance Trust Fund, Fiscal Year 1990 22
4 Assets of the Hospital Insurance Trust Fund, by Type, at the End of Fiscal Years 1989 and 1990 23
5 Operations of the Hospital Insurance Trust Fund During Fiscal Years 1967-93 26
6 Operations of the Hospital Insurance Trust Fund During Calendar Years 1966-93 27
7 Ratio of Assets in the Fund at the Beginning of the Year to Disbursements During the Year for the Hospital Insurance Trust Fund 28
8 Cost of the Hospital Insurance Program, Expressed as a Percent of Taxable Payroll 34
9 Cost and Tax Rates of the Hospital Insurance Program, Expressed as a Percent of Taxable Payroll 35
10 Actuarial Balances of the Hospital Insurance Program, Under Alternative Sets of Assumptions 36
11 Estimated Operations of the Hospital Insurance Trust Fund During Calendar Years 1990-2015, Under Alternative Sets of Assumptions . . 37
12 Change in the 75-Year Actuarial Balance Since the 1990 Report . . 38

A1 Components of Historical and Projected Increases in HI Inpatient Hospital Payments 49
A2 Relationship Between Increases in HI Program Expenditures and Increases in Taxable Payroll 50
A3 Summary of Alternative Projections for the Hospital Insurance Program 51
B1 Actuarial Balances of the Hospital Insurance Program, Under Alternative Sets of Assumptions (Modified Average-Cost Method) . . 53

FIGURES

1 Short-Term HI Trust Fund Ratios 4
2 HI Trust Fund Balance, End-of-Year 5
3 Estimated HI Costs and Tax Rates 8

1991 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL HOSPITAL INSURANCE TRUST FUND

EXECUTIVE SUMMARY

The hospital insurance (HI) program pays for inpatient hospital care and other related care for those age 65 and over, and for the long-term disabled. In calendar year 1990, HI covered about 30 million aged and about 3 million disabled enrollees at a cost of $67.0 billion. Of this amount, $66.2 billion was for benefit payments and $0.8 billion, 1.1 percent of total disbursements, was for administrative expenses.

The payroll taxes of 138 million workers and their employers provided the primary source of financing for the HI program in calendar year 1990. Payroll taxes amounting to $72.0 billion, or 89.6 percent of total income, were collected during the year. Interest credits to the HI trust fund amounted to 10.5 percent of total income. The remaining calendar year 1990 income consisted mostly of a transfer from the railroad retirement program, transfers to and from the general fund of the Treasury, and premiums paid by voluntary enrollees 1/.

The HI program is primarily financed by payroll taxes, with the taxes paid by current workers and their employers used mainly to pay benefits for current beneficiaries. Income not currently needed to pay benefits and related expenses is held in the HI trust fund. The assets of the fund may not be used for any other purpose. While in the fund, the assets are invested in certain interest-bearing obligations of the U.S. Government.

The HI contribution rates applicable to taxable earnings in each of the calendar years 1987 and later are shown in Table I. The maximum taxable amounts of annual earnings are shown for 1987 through 1991. After 1991, the automatic-adjustment provisions in section 230 of the Social Security Act determine the maximum taxable amount.

1/ It can be seen that these minor calendar year 1990 income categories account for -0.1 percent of total income. They contribute in a negative fashion because of the magnitude of a transfer from the HI trust fund to the general fund of the Treasury. This transfer was an adjustment to the lump-sum transfer previously made for military wage credits, as mandated by the provisions of Public Law 98-21. This transfer is discussed in the "Nature of the Trust Fund" and the "Expected Operations and Status of the Trust Fund During the Period October 1, 1990 to December 31, 1993" sections of this report.

TABLE I.--CONTRIBUTION RATES AND MAXIMUM TAXABLE AMOUNT OF ANNUAL EARNINGS

Calendar years	Maximum taxable amount of annual earnings	Contribution rate (Percent of taxable earnings) Employees and employers, each	Self-employed
1987	$ 43,800	1.45	2.90
1988	45,000	1.45	2.90
1989	48,000	1.45	2.90
1990	51,300	1.45	2.90
1991	125,000	1.45	2.90
Changes scheduled in present law:			
1992 & later	Subject to automatic adjustment	1.45	2.90

Actuarial Status of the Trust Fund

The adequacy of the HI program's scheduled financing to support program costs in the future is examined under three alternative sets of assumptions: optimistic, intermediate, and pessimistic. The intermediate set of assumptions represents the Board's best estimate of the expected future economic and demographic trends that will affect the financial status of the program. Under the intermediate set of assumptions (alternative II), the trust fund ratio, defined as the ratio of assets at the beginning of the year to disbursements during the year, is projected to increase until 1995 and then decline steadily until the fund is completely exhausted in 2005. Under the more optimistic set of assumptions (alternative I), the trust fund is projected to remain solvent throughout the first 25-year projection period, with trust fund exhaustion occurring in 2018. Under the more pessimistic set of assumptions (alternative III), the trust fund ratio is projected to increase to a level of about 146 percent in 1993 and then decrease rapidly until the fund is exhausted in 2001.

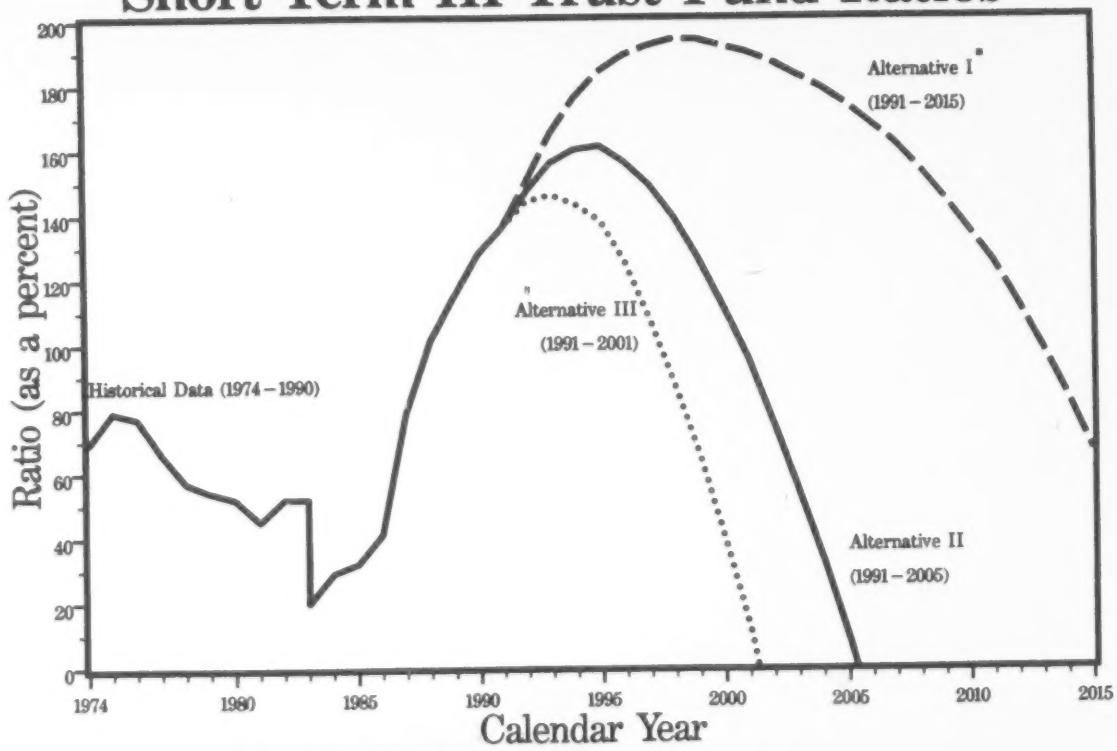
Table 11 in this report summarizes the estimated operations of the HI trust fund that have just been described, under the three alternative sets of assumptions. As can be seen from table 11, the new short-range test of financial adequacy, which is described in the "Actuarial Status of the Trust Fund" section in this report, is met by the fund, under the alternative II assumptions. However, it should be noted that the trust fund is expected to be exhausted shortly after the 10-year period examined in the short-range test. Figure 1 shows historical trust fund ratios for recent years and projected ratios under the three sets of assumptions. Figure 2 shows end-of-year trust fund balances for recent historical years and for projected years under the three sets of assumptions.

The adequacy of the current law financing schedule for the HI program on a long-range basis is measured by comparing on a year-by-year basis the tax rates specified by law with the corresponding incurred costs of the program, expressed as percentages of taxable payroll. However, the financial status of the program is often summarized, over a specific projection period, by a single measure known as the actuarial balance. The actuarial balance is defined to be the excess of the summarized tax rate for the valuation period over the summarized cost rate (insured, incurred costs expressed as a percentage of taxable payroll) of the program for the same period. The "Actuarial Status of the Trust Fund" section in this report describes the method used to calculate summarized cost rates, tax rates, and actuarial balances in this report. Table II displays the actuarial balances under each of the three sets of assumptions for the 25-year projection period 1991-2015, the 50-year projection period 1991-2040, the 75-year projection period 1991-2065, and for each 25-year subperiod. The trust fund does not meet the new long-range test of financial adequacy, as mentioned in the "Actuarial Status of the Trust Fund" section, under any of the three assumption sets. Figure 3 shows the year-by-year costs as a percent of taxable payroll for each of the three sets of assumptions, as well as the scheduled tax rates. Figure 3 illustrates the inadequacy of the current financing of the HI program by displaying the divergence of the program costs and scheduled tax rates under each set of assumptions.

Table III presents a comparison of the projected experience in the 1990 and 1991 reports. As Table III indicates, the projections in the 1991 report show that the fund will be depleted at about the same time as in the 1990 report under all three sets of assumptions. Table IV shows the major reasons for the change in the 75-year actuarial balance of the HI program from that in the 1990 report. The section of this report entitled "Actuarial Status of the Trust Fund" discusses more completely the reasons for the change in the actuarial balance.

Figure 1

Short-Term HI Trust Fund Ratios

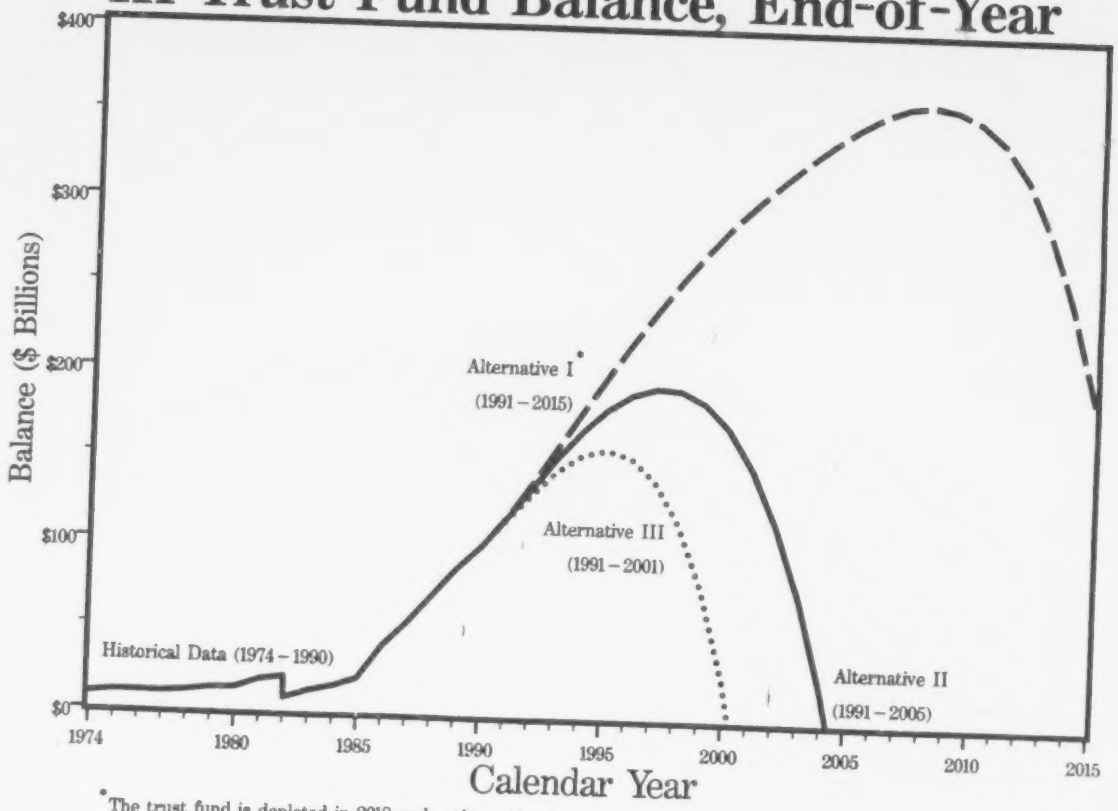


*The trust fund is depleted in 2018 under alternative I.

Note: The trust fund ratio is defined as the ratio of assets at the beginning of the year to disbursements during the year.

Figure 2

HI Trust Fund Balance, End-of-Year



*The trust fund is depleted in 2018 under alternative I.

TABLE II.--ACTUARIAL BALANCES OF THE HOSPITAL INSURANCE PROGRAM, UNDER ALTERNATIVE SETS OF ASSUMPTIONS

	Alternative		
	I	II	III
Projection periods:			
1991-2015:			
Summarized tax rate 1/	2.90%	2.90%	2.90%
Summarized cost rate 2/	3.03	3.86	5.06
Actuarial balance 3/	-0.13	-0.96	-2.16
1991-2040:			
Summarized tax rate 1/	2.90	2.90	2.90
Summarized cost rate 2/	3.48	5.39	8.86
Actuarial balance 3/	-0.58	-2.49	-5.96
1991-2065:			
Summarized tax rate 1/	2.90	2.90	2.90
Summarized cost rate 2/	3.71	6.25	10.93
Actuarial balance 3/	-0.81	-3.35	-8.03
25-year subperiods:			
1991-2015:			
Summarized tax rate 1/	2.90%	2.90%	2.90%
Summarized cost rate 4/	3.06	3.82	4.91
Actuarial balance 3/	-0.16	-0.92	-2.01
2016-2040:			
Summarized tax rate 1/	2.90	2.90	2.90
Summarized cost rate 4/	4.03	7.28	13.45
Actuarial balance 3/	-1.13	-4.38	-10.55
2041-2065:			
Summarized tax rate 1/	2.90	2.90	2.90
Summarized cost rate 4/	4.53	8.84	17.53
Actuarial balance 3/	-1.63	-5.94	-14.63

1/ As scheduled under present law.
2/ Expenditures for benefit payments and administrative costs for insured beneficiaries, on an incurred basis, expressed as a percentage of taxable payroll, computed on the present-value basis, including the cost of attaining a trust fund balance at the end of the period equal to 100% of the following year's estimated expenditures, and including an offset to cost due to the beginning trust fund balance.
3/ Difference between the summarized tax rate (as scheduled under present law) and the summarized cost rate.
4/ Expenditures for benefit payments and administrative costs for insured beneficiaries, on an incurred basis, expressed as a percentage of taxable payroll, computed on the present-value basis. Includes neither the trust fund balance at the beginning of the period nor the cost of attaining a non-zero trust fund balance at the end of the period.

TABLE III.--STATUS OF THE HOSPITAL INSURANCE TRUST FUND

Sets of assumptions	Year in which the trust fund is exhausted as published in the		75-year actuarial balance 1/ of the HI program as published in the	
	1990 report	1991 report	1990 report	1991 report
I (optimistic)	2018	2018	-0.75%	-0.81%
II (intermediate)	2003 2/	2005	-3.26 3/	-3.35
III (pessimistic)	1999	2001	-8.35	-8.03

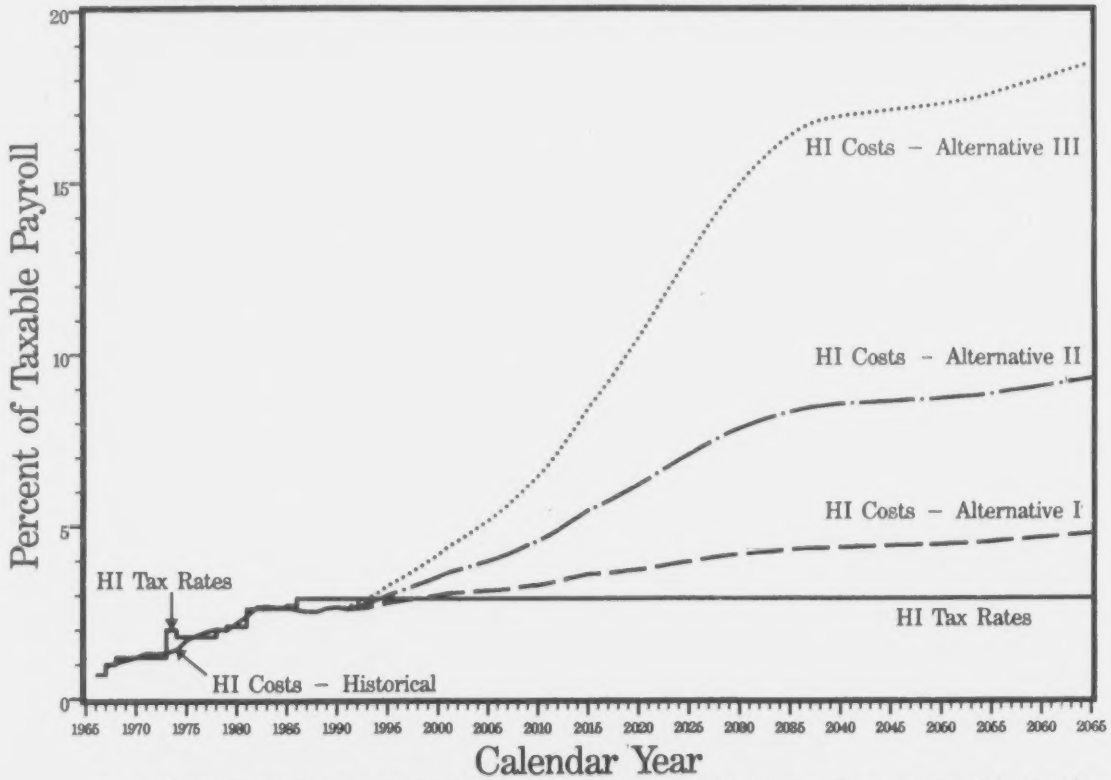
1/ The actuarial balance in the 1990 report was computed on the present-value basis (then referred to as the level-financing basis), without the cost of attaining a non-zero trust fund balance at the end of the period. In this report, it is computed on the present-value basis, including the cost of attaining a trust fund balance at the end of the period equal to 100% of the following year's estimated expenditures.

2/ In the 1990 report, estimates under two sets of intermediate assumptions, labeled "alternative II-A" and "alternative II-B," were presented. The figure shown is the year of trust fund exhaustion as estimated under the alternative II-B assumptions. Under alternative II-A, the trust fund was estimated to be exhausted in 2005.

3/ In the 1990 report, estimates under two sets of intermediate assumptions, labeled "alternative II-A" and "alternative II-B," were presented. The figure shown is the actuarial balance as estimated under the alternative II-B assumptions. Under alternative II-A, the actuarial balance was estimated to be -2.83%.

Figure 3

Estimated HI Costs and Tax Rates


Percent of Taxable Payroll
20
15
10
5
0
HI Costs – Alternative III
HI Costs – Alternative II
HI Costs – Alternative I
HI Tax Rates
HI Tax Rates
HI Costs – Historical
1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015 2020 2025 2030 2035 2040 2045 2050 2055 2060 2065
Calendar Year

Note: HI projected costs shown are expenditures attributable to insured beneficiaries only, on an incurred basis, without an allowance for maintaining the trust fund balance at a desired level.

Table IV.--CHANGE IN THE 75-YEAR ACTUARIAL BALANCE SINCE THE 1990 REPORT

1. Actuarial balance, alternative II-B, 1990 report 1/	-3.26%
2. Changes:	
a. Valuation period	-0.09
b. Base estimate	-0.22
c. Legislation since the 1990 report	+0.68
d. Economic and demographic assumptions	-0.22
e. Hospital assumptions	-0.15
f. Definitional change 2/	-0.09
g. Net effect, above changes	-0.09
3. Actuarial balance, alternative II, 1991 report 3/	-3.35

1/ The actuarial balance in the 1990 report was computed on the present-value basis (then referred to as the level-financing basis), including an offset to cost due to the beginning trust fund balance but without the cost of attaining a non-zero trust fund balance at the end of the period.

2/ The definitional change is the inclusion of the cost of attaining a trust fund balance at the end of the period equal to 100% of the following year's estimated expenditures; see 1/ and 3/.

3/ The actuarial balance in the 1991 report is computed on the present-value basis, including the cost of attaining a trust fund balance at the end of the period equal to 100% of the following year's estimated expenditures, and including an offset to cost due to the beginning trust fund balance.

Conclusion of the Board of Trustees

The present financing schedule for the HI program is sufficient to ensure the payment of benefits over the next 14 years with trust fund exhaustion occurring in 2005, if the alternative II assumptions are realized. Under the more pessimistic alternative III, the fund is exhausted in 2001. Under the more optimistic alternative I, the trust fund is exhausted in 2018.

There are currently over four covered workers supporting each HI enrollee. This ratio will begin to decline rapidly early in the next century. By the middle of that century, there will be only about two covered workers supporting each enrollee. Not only are the anticipated reserves and financing of the HI program inadequate to offset this demographic change, but under all but the most optimistic assumptions, the trust fund is projected to become exhausted even before the major demographic shift begins to occur. Exhaustion of the fund is projected to occur shortly after the turn of the century under the intermediate assumptions, and could occur as early as 2001 if the pessimistic assumptions are realized.

The Board notes that promising steps have been taken to begin reducing the rate of growth in payments to hospitals, including the implementation of prospective payment and diagnosis-related groups. Initial experience under the prospective payment system for hospitals suggests that this payment mechanism can be an effective means of constraining the growth in hospital payments and improving the efficiency of the hospital industry. Efforts focused on improving the efficiency and reducing the costs of the health care delivery system need to be continued, in close combination with mechanisms that will assure that the quality of health care is not adversely affected.

Even though the HI trust fund is financially adequate based on the short-range test, because of the magnitude of the projected actuarial deficit in the HI program and the high probability that the HI trust fund will be exhausted shortly after the turn of the century, the Board believes that corrective action will be needed very soon in order to avoid the need for potentially precipitious changes later.

THE BOARD OF TRUSTEES

The Federal Hospital Insurance Trust Fund, established on July 30, 1965, is held by the Board of Trustees under the authority of section 1817(b) of the Social Security Act, as amended. The Board is composed of five members, three of whom serve in an ex officio capacity: the Secretary of the Treasury, the Secretary of Labor, and the Secretary of Health and Human Services. The President nominated and the Senate confirmed Stanford G. Ross and David M. Walker to be the other two members, who serve as representatives of the public. Mr. Ross and Mr. Walker are serving 4-year terms that began on October 2, 1990.

By law, the Secretary of the Treasury is designated as the Managing Trustee, and the Administrator of the Health Care Financing Administration is designated as Secretary of the Board. The Board of Trustees reports to the Congress each year on the operation and status of the trust fund, in compliance with section 1817(b)(2) of the Social Security Act. This annual report, for 1991, is the 26th such report.

SOCIAL SECURITY AMENDMENTS SINCE THE 1990 REPORT

Since the 1990 Annual Report was transmitted to Congress, only one law affecting the HI program in a significant way has been enacted. The Omnibus Budget Reconciliation Act (OBRA) of 1990 (Public Law 101-508, enacted into law on November 5, 1990) included a number of provisions affecting the HI program. The more important legislative changes, from a financial standpoint, are described below.

(1) For calendar year 1991, the contribution base for taxes collected for the HI program is $125,000. For subsequent years, the contribution bases will again be determined under the automatic-adjustment provisions in section 230 of the Social Security Act.

(2) Coverage of certain State and local employees is extended to include most employees of State or local governments who are not members of a retirement system of the State or locality.

(3) For payments to hospitals reimbursed under the prospective payment system (PPS) for discharges occurring on or after January 1, 1991, the hospital update factors for fiscal years 1991, 1992, and 1993 for urban hospitals are the market basket percentage increase for each year minus 2.0, 1.6, and 1.55 percentage points, respectively, and for rural hospitals are the market basket percentage increase for each year minus 0.7, 0.6, and 0.55 percentage points, respectively. For fiscal years 1994 and 1995, the PPS hospital update factors for urban hospitals revert to the market basket percentage increase each year (in accordance with the statute prior to, and unaffected by, the enactment of OBRA of 1990), but for rural hospitals reimbursed under PPS, the fiscal year 1994 update factor is the market basket percentage increase plus 1.5 percentage points and the fiscal year 1995 update factor is to be determined such that the fiscal year 1995 payment rates for PPS hospitals in rural areas will be equal to that for PPS hospitals in urban areas with populations of less than one million people.

(4) Payments for capital-related costs will be reduced by 15 percent during fiscal year 1991. For fiscal years 1992 through 1995, aggregate payments to PPS hospitals will be reduced by an amount equal to a 10 percent reduction in capital payments had they been based on reasonable costs. The exemption for sole community hospitals is extended to rural primary care hospitals as well.

(5) The disproportionate share adjustment percentages, used for increasing payments to hospitals serving disproportionate shares of low-income patients (according to criteria and payment formulae that vary by type of hospital), are revised, effective for discharges occurring on or after January 1, 1991. Further revisions are made effective October 1, 1993 and October 1, 1994. The sunset provision for disproportionate share has also been eliminated.

(6) Payments for certain services provided from October 21, 1990 through December 31, 1990 are frozen at fiscal year 1990 levels.

(7) Recoupments of graduate medical education overpayments from hospitals may not take place before October 1, 1991. The annual recoupments in any fiscal year may not exceed 25 percent of the total recoupments.

(8) Payments for university hospital nursing education programs should be reimbursed for clinical training if they had been reimbursed prior to October 1, 1989. Recoupments of these costs are now prohibited and prior recoupments must be refunded.

(9) The period for which Medicare is secondary payer for end-stage renal disease (ESRD) beneficiaries is extended from 12 to 18 months. Additionally, the secondary payer provision is extended for ESRD beneficiaries through December 31, 1995, and for disabled beneficiaries through September 30, 1995.

Detailed information regarding these changes and other less-significant changes can be found in documents prepared by and for the Congress. The estimates shown in this report reflect the anticipated effects of these changes.

NATURE OF THE TRUST FUND

The Federal Hospital Insurance Trust Fund was established on July 30, 1965, as a separate account in the United States Treasury. All the financial operations of the HI program are handled through this fund.

The primary source of income to the trust fund is amounts appropriated to it under permanent authority on the basis of contributions paid by workers, their employers, and individuals with self-employment income, in work covered by the HI program. Beginning January 1, 1987, these appropriated amounts include contributions paid by, or on behalf of, workers employed by State and local governments and their employers, with respect to work covered by the program through State agreements. (Prior to 1987, such contributions were deposited directly into the trust fund.) The coverage of the HI program includes workers covered under the old-age, survivors, and disability insurance (OASDI) program, those covered under the railroad retirement program, and certain Federal, State, and local employees not otherwise covered under the OASDI program.

All employees, and their employers, in employment covered by the program are required to pay contributions with respect to the wages of individual workers, including cash tips. All covered self-employed persons are required to pay contributions with respect to their self-employment income.

In general, an individual's contributions are computed on annual wages or self-employment income, or both wages and self-employment income combined, up to a specified maximum annual amount, with the contributions being determined first on the wages and then on any self-employment income up to the maximum annual amount. An employee who pays contributions on wages in excess of the annual maximum amount (because of employment with two or more employers) is eligible for a refund of the excess employee contributions. The maximum amount of earnings on which contributions are payable in a year is called the contribution base.

The HI contribution rates applicable to taxable earnings in each of the calendar years 1966 and later are shown in table 1. For 1992 and later, the contribution rates shown are the rates scheduled in the provisions of present law. The contribution bases for calendar years 1966 to 1991 are also shown. For 1975 to 1978, the contribution bases were determined under the automatic-adjustment provisions in section 230 of the Social Security Act. The bases for 1979 to 1981 were specified in the law, as amended in 1977. For 1981 to 1990, the automatic-adjustment provisions were again applicable, as they will be for 1992 and later. For calendar year 1991, the contribution base is specified in the law, as amended in 1990.

All contributions are collected by the Internal Revenue Service and deposited in the general fund of the Treasury as internal revenue collections. The contributions received are automatically appropriated, on an estimated basis, to the trust fund. The exact amount of contributions received is not known initially since HI contributions, OASDI contributions, and individual income taxes are not separately identified in collection reports received by the Treasury Department. Periodic adjustments are subsequently made to the extent that the estimates are found to differ from the amounts of contributions actually payable on the basis of reported earnings.

Prior to May 1983 and after June 1984, the estimated internal revenue collections were transferred to the trust funds immediately upon receipt. For May 1983 through June

1984, estimated total collections for each month were credited to the trust funds on the first day of the month. As the actual collections were received during the month, they were deposited in the general fund of the Treasury and remained there. The trust funds paid interest to the general fund to reimburse it for the interest lost because of this provision.

An employee who worked for more than one employer during the course of a year and paid contributions on wages in excess of the statutory maximum can receive a refund of the contributions he paid on such excess wages. The amount of contributions subject to refund for any period is a charge against the trust fund.

Another substantial source of trust fund income is interest credited from investments in government securities held by the fund. The investment procedures of the fund are described later in this section.

The income and expenditures of the trust fund are also affected by the provisions of the Railroad Retirement Act which provide for a system of coordination and financial interchange between the railroad retirement program and the HI program.

Sections 217(g) and 229(b) of the Social Security Act, prior to modification by the Social Security Amendments of 1983, authorized annual reimbursement from the general fund of the Treasury to the HI trust fund for costs arising from the granting of deemed wage credits for military service prior to 1957, according to quinquennial determinations made by the Secretary of Health and Human Services. These sections, as modified by the Social Security Amendments of 1983, provided for a lump sum transfer in 1983 for costs arising from such wage credits. In addition, the lump sum transfer included combined employer-employee HI taxes on the noncontributory wage credits for military service after 1965 and before 1984. After 1983, HI taxes on military wage credits are credited to the fund on July 1 of each year. The Social Security Amendments of 1983 also provided for (1) quinquennial adjustments to the lump sum amount transferred in 1983 for costs arising from pre-1957 deemed wage credits and (2) adjustments as deemed necessary to any previously transferred amounts representing HI taxes on noncontributory wage credits.

Section 231 of the Social Security Act authorizes reimbursement from the general fund of the Treasury to the HI trust fund for any costs arising from the granting of deemed wage credits to individuals who were interned during World War II at a place within the United States operated by the Federal Government for the internment of persons of Japanese ancestry.

Under section 103 of the Social Security Amendments of 1965, HI benefits are provided to certain uninsured persons aged 65 and over. Such payments are made initially from the HI trust fund, with reimbursement from the general fund of the Treasury for the costs, including administrative expenses, of the payments. The reimbursements so made are on a provisional basis and are subject to adjustment, with appropriate interest allowances, as the actual experience develops and is analyzed.

Section 1818 of the Social Security Act provides that certain persons not eligible for HI protection either on an insured basis or on the uninsured basis described in the previous paragraph may obtain protection by enrolling in the program and paying a monthly premium.

Section 201(i) of the Social Security Act authorizes the Managing Trustee to accept and deposit in the trust fund unconditional money gifts or bequests made for the benefit of the fund or any activity financed through the fund.

Expenditures for benefit payments and administrative expenses under the HI program are paid from the trust fund. All expenses incurred by the Department of Health and Human Services and by the Treasury Department in carrying out the provisions of title XVIII of the Social Security Act pertaining to the HI program and of the Internal Revenue Code relating to the collection of contributions are charged to the trust fund. The Secretary of Health and Human Services certifies benefit payments to the Managing Trustee, who makes the payments from the trust fund in accordance therewith.

Prior to fiscal year 1984, hospitals, at their option, were permitted to combine their billing for both hospital and physician components of radiology and pathology services rendered to hospital inpatients by hospital-based physicians. Where hospitals elected this billing procedure, payments were made initially from the HI trust fund. The reimbursements so made were on a provisional basis and are subject to adjustment, with appropriate interest allowance.

The Social Security Amendments of 1967 and 1972 authorize the Secretary of Health and Human Services to develop and conduct a broad range of experiments and demonstration projects designed to determine various methods of increasing efficiency and economy in providing health care services, while maintaining the quality of such services, under the HI and supplementary medical insurance (SMI) programs. A sizable portion of the costs of such experiments and demonstration projects is paid from the HI and SMI trust funds.

Congress has authorized expenditures from the trust funds for construction, rental and lease, or purchase contracts of office buildings and related facilities for use in connection with the administration of the HI program. Both the capital costs of construction financed directly through the trust funds and the rental and lease, or purchase contract costs of acquiring facilities are included in trust fund expenditures. In 1972-75, construction of several large facilities was authorized under purchase contract authority, wherein initial capital costs were borne by the private sector. Under this method of facilities acquisition, trust fund expenditures for use and ultimate Government ownership of a facility are made over periods of from 10 to 30 years. Whatever the manner of acquisition, the net worth of facilities and other fixed capital assets is not carried in the statement of the assets of the trust fund presented in this report. This is because the value of fixed capital assets does not represent funds available for benefit or administrative expenditures and, therefore, is not viewed as being a consideration in assessing the actuarial status of the funds.

That portion of the trust fund which, in the judgment of the Managing Trustee, is not required to meet current expenditures for benefits and administration, is invested, on a daily basis, in interest-bearing obligations of the U.S. Government (including special public-debt obligations described below), in obligations guaranteed as to both principal and interest by the United States, or in certain federally sponsored agency obligations that are designated in the laws authorizing their issuance as lawful investments for trust funds under the control and authority of the United States or any officer of the United States. These obligations may be acquired on original issue at the issue price or by purchase of outstanding obligations at their market price.

The Social Security Act authorizes the issuance of special public-debt obligations for purchase exclusively by the trust fund. The law requires that such special public-debt obligations shall bear interest at a rate based on the average market yield (computed on the basis of market quotations as of the end of the calendar month next preceding the date of such issue) on all marketable interest-bearing obligations of the United States forming a part of the public debt which are not due or callable until after the expiration of 4 years from the end of such month. These special issue securities are redeemable at par value at all times, and so are not subject to the uncertainty of price fluctuations as interest rates change.

From December 29, 1981, until January 1, 1988, the Social Security Act authorized borrowing among the OASI, DI, and HI trust funds when necessary "to best meet the need for financing the benefit payments" from the three funds. Interfund loans under the borrowing authority were made to the OASI trust fund from the DI and HI trust funds in 1982, and were fully repaid by May 1986. In this report, the assets of the HI trust fund at the end of 1982 through 1985, inclusive, do not include the amounts owed to the trust fund. This procedure is followed because the borrowed amounts were available to the borrowing fund for the payment of benefits or other obligations, while such amounts were not readily available to the lending fund.

TABLE 1.--CONTRIBUTION RATES AND MAXIMUM TAXABLE AMOUNT OF ANNUAL EARNINGS

Calendar years	Maximum taxable amount of annual earnings	Contribution rate (Percent of taxable earnings)	
		Employees and employers, each	Self-employed
Past experience:			
1966	$6,600	0.35	0.35
1967	6,600	0.50	0.50
1968-71	7,800	0.60	0.60
1972	9,000	0.60	0.60
1973	10,800	1.00	1.00
1974	13,200	0.90	0.90
1975	14,100	0.90	0.90
1976	15,300	0.90	0.90
1977	16,500	0.90	0.90
1978	17,700	1.00	1.00
1979	22,900	1.05	1.05
1980	25,900	1.05	1.05
1981	29,700	1.30	1.30
1982	32,400	1.30	1.30
1983	35,700	1.30	1.30
1984	37,800	1.30	2.60
1985	39,600	1.35	2.70
1986	42,000	1.45	2.90
1987	43,800	1.45	2.90
1988	45,000	1.45	2.90
1989	48,000	1.45	2.90
1990	51,300	1.45	2.90
1991	125,000	1.45	2.90
Changes scheduled in present law:			
1992 & later	Subject to automatic adjustment	1.45	2.90

SUMMARY OF THE OPERATIONS OF THE TRUST FUND, FISCAL YEAR 1990

A statement of the income and disbursements of the Federal Hospital Insurance Trust Fund in fiscal year 1990, and of the assets of the fund at the beginning and end of the fiscal year, is presented in table 2.

The total assets of the trust fund amounted to $82,755 million on September 30, 1989. During fiscal year 1990, total receipts amounted to $79,563 million, and total disbursements were $66,687 million. The assets of the trust fund thus increased $12,876 million during the year to a total of $95,631 million on September 30, 1990.

Included in total receipts during fiscal year 1990 was $70,878 million representing contributions appropriated to the trust fund. As an offset, $215 million was transferred from the trust fund into the Treasury as repayment for the estimated amount of contributions subject to refund to employees who worked for more than one employer during the course of a year and paid contributions on wages in excess of the statutory maximum earnings base, and $8 million was transferred from the trust fund to State and local governments for overpayments from previous State agreements for coverage of State and local government employees.

Net contributions amounted to $70,655 million, representing an increase of 4.6 percent over the amount of $67,527 million for the preceding 12-month period. This growth in contribution income resulted primarily from (1) the higher level of earnings in covered employment and (2) the two increases in the maximum annual amount of earnings taxable from $45,000 to $48,000 and from $48,000 to $51,300 that became effective January 1, 1989, and January 1, 1990, respectively.

The section entitled "Nature of the Trust Fund" referred to provisions under which the HI trust fund is to be reimbursed from the general fund of the Treasury for costs of paying benefits under this program on behalf of certain uninsured persons. The reimbursement in fiscal year 1990 amounted to $413 million, consisting of $406 million for benefit payments and $7 million for administrative expenses.

The section entitled "Nature of the Trust Fund" referred to provisions of the Social Security Act under which certain persons not otherwise eligible for HI protection may obtain such protection by enrolling in the program and paying a monthly premium. Premiums collected from such voluntary participants in fiscal year 1990 amounted to about $113 million.

In accordance with the provisions of the Railroad Retirement Act which coordinate the railroad retirement and the HI programs and which govern the financial interchange arising from the allocation of costs between the two systems, the Railroad Retirement Board and the Secretary of Health and Human Services determined that a transfer of about $332 million in principal and $14 million in interest from the railroad retirement program's Social Security Equivalent Benefit Account to the HI trust fund would place this fund in the same position, as of September 30, 1989, in which it would have been if railroad employment had always been covered under the Social Security Act. This amount, together with interest to the date of transfer amounting to about $21 million, was transferred to the trust fund in June 1990.

In accordance with provisions for the appropriation to the trust fund of HI taxes on noncontributory military wage credits as discussed in the section entitled "Nature of the

Trust Fund," the trust fund was credited on July 1, 1990 with $107 million for calendar year 1990 taxes on wage credits.

The remaining $7,908 million of receipts consisted almost entirely of interest credited from the investments held by the trust fund.

Of the $66,687 million in total disbursements, $65,912 million represented benefits paid directly from the trust fund for health services covered under title XVIII of the Social Security Act. Benefit payments increased 14.8 percent in fiscal year 1990 over the corresponding amount of $57,433 million paid during the preceding 12 months.

The remaining $774 million of disbursements was for net administrative expenses. Administrative expenses are allocated and charged directly to each of the four trust funds --OASI, DI, HI, and SMI--on the basis of provisional estimates. Similarly, the expenses of administering other programs of the Health Care Financing Administration are also allocated and charged directly to the general fund of the Treasury on a provisional basis. Periodically, as actual experience develops and is analyzed, adjustments to the allocations of administrative expenses and costs of construction for prior periods are effected by interfund transfers, including transfers between the HI and SMI trust funds and the program management general fund account, with appropriate interest allowances.

Table 3 compares the actual experience in fiscal year 1990 with the estimates presented in the 1989 and 1990 annual reports. The section entitled "Nature of the Trust Fund" referred to the appropriation of contributions to the trust funds on an estimated basis, with subsequent periodic adjustments to account for differences from the amounts of contributions actually payable on the basis of reported earnings. In interpreting the figures in table 3, it should be noted that the "actual" amount of contributions in fiscal year 1990 reflects the aforementioned type of adjustments to contributions for prior fiscal years. On the other hand, the "actual" amount of contributions for fiscal year 1990 does not reflect adjustments to contributions for fiscal year 1990 that were to be made after September 30, 1990.

The assets of the HI trust fund at the end of fiscal year 1989 totaled $82,755 million, consisting of $82,914 million in the form of obligations of the U.S. Government or of federally-sponsored agency obligations and, as an offset, an extension of credit of $159 million against securities to be redeemed. The assets of the HI trust fund at the end of fiscal year 1990 totaled $95,631 million, consisting of $96,249 million in the form of obligations and, as an offset, an extension of credit of $617 million against securities to be redeemed. Table 4 shows the total assets of the fund and their distribution at the end of fiscal years 1989 and 1990.

New securities at a total par value of $110,141 million were acquired during the fiscal year through the investment of receipts and the reinvestment of funds made available from the redemption of securities. The par value of securities redeemed during the fiscal year was $96,806 million. Thus, the net increase in the par value of the investments held by the fund during fiscal year 1990 amounted to $13,335 million.

The effective annual rate of interest earned by the assets of the HI trust fund during the 12 months ending on June 30, 1990, was 9.7 percent. (This period is used because interest on special issues is paid semiannually on June 30 and December 31.) The interest rate on public-debt obligations issued for purchase by the trust fund in June 1990 was 8.75 percent, payable semiannually.

TABLE 2.--STATEMENT OF OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND DURING FISCAL YEAR 1990
(In thousands of dollars)

Total assets of the trust fund, beginning of period	$82,755,102
Receipts:	
Appropriation of employment taxes	$70,877,837
Refunds of employment taxes	-215,100
Deposits arising from State agreements	-7,852
Interest on investments	7,905,563
Premiums collected from voluntary participants	112,760
Transfer from railroad retirement account	332,300
Transitional uninsured coverage	413,000
Military service credits of 1990	106,737
Interest on reimbursements, SSA 1/	2,200
Interest on reimbursements, HCFA 1/	0
Interest on reimbursements, Railroad	35,091
Other (Gifts)	41
Total receipts	$79,562,577
Disbursements:	
Benefit payments	$65,912,338
Administrative expenses:	
Treasury administrative expenses	4,933
Salaries and expenses, SSA 2/	326,641
Salaries and expenses, HCFA 3/	412,958
Salaries and expenses, Office of Secretary	21,032
Construction	1,829
Professional Standards Review Organization	-15
Reimbursement of SSA expenses	0
Reimbursement of HCFA expenses	0
Payment Assessment Committee	3,289
Policy and Research	3,622
Total disbursements	$66,686,627
Total assets of the trust fund, end of period	$95,631,052

1/ A positive figure represents a transfer to the HI trust fund from the other trust funds. A negative figure represents a transfer from the HI trust fund to the other trust funds.
2/ For facilities, goods, and services provided by the Social Security Administration (SSA).
3/ Includes administrative expenses of the intermediaries.

NOTE: Totals do not necessarily equal the sums of rounded components.

TABLE 3.--COMPARISON OF ACTUAL AND ESTIMATED OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND, FISCAL YEAR 1990
(Dollar amounts in millions)

Item	Actual amount	Comparison of actual experience with estimates for fiscal year 1990 published in--			
		1990 report 1/		1989 report 1/	
		Estimated amount	Actual as percentage of estimate	Estimated amount	Actual as percentage of estimate
Net contributions	$70,655	$70,952	100	$71,331	99
Benefit payments	$65,912	$63,145	104	$65,476	101

1/ Alternative II-B.

TABLE 4.--ASSETS OF THE HOSPITAL INSURANCE TRUST FUND, BY TYPE, AT THE END OF FISCAL YEARS 1989 AND 1990 1/

	September 30, 1989	September 30, 1990
Investments in public-debt obligations sold only to the trust funds (special issues):		
Certificates of indebtedness:		
8 7/8-percent, 1991	------	$4,150,537,000.00
8 3/8-percent, 1990	$2,484,226,000.00	------
Bonds:		
8 1/4-percent, 1993	622,286,000.00	622,286,000.00
8 3/8-percent, 1991	1,231,586,000.00	------
8 3/8-percent, 1992-2001	12,834,492,000.00	12,834,492,000.00
8 5/8-percent, 1990	683,175,000.00	------
8 5/8-percent, 1991	686,250,000.00	------
8 5/8-percent, 1992-2002	10,057,904,000.00	10,057,904,000.00
8 3/4-percent, 1990	1,214,351,000.00	------
8 3/4-percent, 1991	1,214,351,000.00	------
8 3/4-percent, 1992-2004	20,989,251,000.00	33,617,471,000.00
8 3/4-percent, 2005	------	6,415,695,000.00
9 1/4-percent, 1990	1,034,541,000.00	------
9 1/4-percent, 1991	1,034,541,000.00	1,000,698,000.00
9 1/4-percent, 1992-2003	15,609,899,000.00	15,609,899,000.00
9 3/4-percent, 1993-1995	1,240,090,000.00	1,240,090,000.00
10 3/8-percent, 1990	427,022,000.00	------
10 3/8-percent, 1991-1992	854,046,000.00	854,046,000.00
10 3/8-percent, 1998-2000	2,131,610,000.00	2,131,610,000.00
10 3/4-percent, 1990	588,410,000.00	------
10 3/4-percent, 1991-1992	1,176,820,000.00	1,176,820,000.00
10 3/4-percent, 1998	588,410,000.00	588,410,000.00
13 -percent, 1993-1996	1,770,094,000.00	1,770,094,000.00
13 1/4-percent, 1993-1997	2,541,541,000.00	2,541,541,000.00
13 3/4-percent, 1990	262,135,000.00	------
13 3/4-percent, 1991-1992	524,268,000.00	524,268,000.00
13 3/4-percent, 1998-1999	1,112,678,000.00	1,112,678,000.00
Total investments	$82,913,977,000.00	$96,248,539,000.00
Undisbursed balance	-158,875,425.33	-617,486,894.57
Total assets	$82,755,101,574.67	$95,631,052,105.43

1/ Certificates of indebtedness and bonds are carried at par value, which is the same as book value.

EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND DURING THE PERIOD OCTOBER 1, 1990 TO DECEMBER 31, 1993

The expected operations of the trust fund during fiscal years 1991 to 1993 are shown in table 5, together with the past experience of the program. The projection shown in table 5, and discussed in this section, is based on an intermediate set of projection assumptions labeled "Alternative II." This set of assumptions represents the Board's best estimate of the expected future economic and demographic trends that will affect the financial status of the program. The assumptions underlying the alternative II projections are presented in appendix A.

Income received through the financial interchange between the railroad retirement account and the trust fund under the provisions of the Railroad Retirement Act is estimated on the same basis as income from HI contributions. Estimates of the corresponding outgo are included in the disbursement items.

Estimated income to the trust fund which is appropriated from general revenues to reimburse the program for the cost of coverage of noninsured persons is the same as the estimates of disbursements incurred for such persons, net of corrections for differences between costs and amounts transferred for previous years. Premium income for other noninsured persons who may enroll in the HI program on a voluntary basis is estimated based on projected premium rates calculated according to statute and estimated average enrollment.

The transfers from general revenues for military wage credits are based on provisions of the Social Security Amendments of 1983 (Public Law 98-21), as described in the "Nature of the Trust Fund" section. In addition, a transfer from the HI trust fund to the general fund of the Treasury was made in fiscal year 1991. This transfer is an adjustment to the lump sum transfer made in fiscal year 1983, and was determined in the 1990 quinquennial Military Service Determination, as described in the "Nature of the Trust Fund" section.

The investment of new assets received during fiscal years 1991-93 is assumed to be in the form of special public-debt obligations bearing interest rates ranging from 7.25 percent to 8 percent, payable semiannually. The average effective annual rate of interest on the assets held by the HI trust fund on September 30, 1990, was 9.4 percent.

Disbursements for benefits are projected to increase in fiscal years 1991-93, primarily as a result of the increase in hospital payment rates and hospital admissions under the program. The expenditures for benefit payments shown in table 5 differ from those shown in the 1992 Federal Budget. These estimates are based on more recent demographic and economic projections, and they do not reflect the implementation of proposed changes in regulations which were included in the budget. The expenditures for benefit payments shown in this section are based on the assumption that for fiscal years 1992 and later, the prospective payment rates will be increased in accordance with Public Law 101-508, the Omnibus Budget Reconciliation Act of 1990; for fiscal year 1991, the prospective payment rates have already been determined, in accordance with the same statute.

The actual operations of the HI program are organized, in general, on a calendar year basis. Earnings subject to taxation and the applicable tax rates are established by calendar year, as are the inpatient hospital deductible and other cost-sharing amounts. The projected operations of the trust fund on a calendar year basis are shown in table 6, according to the same assumptions as used in table 5. The ratios of assets in the trust

fund at the beginning of each calendar year to total disbursements during that year are shown in table 7 for past years and as projected, under the same assumptions, through 1993.

TABLE 5.--OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND DURING FISCAL YEARS 1967-93
(In millions)

Fiscal year 1/	Income							Disbursements				Trust fund	
	Payroll taxes	Transfers from railroad retirement account	Reimbursement for uninsured persons	Premiums from voluntary enrollees	Payments for military wage credits	Interest on investments and other income 2/	Total income	Benefits payments 3/	Administrative expenses 4/	Total disbursements	Interfund borrowing transfers 5/	Net increase in fund	Fund at end of year
Historical Data:													
1967	$2,689	$16	$327		$11	$46	$3,089	$2,508	$89	$2,597		$492	$1,343
1968	3,514	44	273		11	61	3,902	3,736	79	3,815		88	1,431
1969	4,423	54	749		22	96	5,344	4,654	104	4,758		586	2,017
1970	4,785	64	617		11	137	5,614	4,804	149	4,953		661	2,677
1971	4,898	66	863		11	180	6,018	5,442	150	5,592		426	3,103
1972	5,226	66	503		48	188	6,031	6,108	167	6,276		-245	2,859
1973	7,663	63	381		48	196	8,352	6,648	194	6,842		1,510	4,369
1974	10,602	99	451	$4	48	405	11,610	7,806	259	8,065		3,545	7,914
1975	11,291	132	481	6	48	609	12,568	10,353	259	10,612		1,956	9,870
1976	12,031	138	610	8	48	709	13,544	12,267	312	12,579		966	10,836
T.Q.	3,366	143	0 6/	2	0	5	3,516	3,315	89	3,404		112	10,948
1977	13,649	0 7/	803 6/	11	141	770	15,374	14,906	301	15,207		167	11,115
1978	16,677	214 7/	688	12	143 8/	809	18,543	17,411	451	17,862		681	11,796
1979	19,927	191	734	17	141	901	21,910	19,891	452	20,343		1,567	13,363
1980	23,244	244	697	17	141	1,072	25,415	23,790	497	24,288		1,127	14,490
1981	30,425	276	659	21	141	1,341	32,863	28,907	353	29,260		3,603	18,093
1982	34,390	351	808	25	207	1,829	37,611	34,343	521	34,864		2,747	20,840
1983	36,387	358	878	26	3,663 9/	2,629	43,940	38,102	522	38,624	-$12,437	-7,121	13,719
1984	41,364	351	752	35	250	2,812	45,563	41,476	633	42,108		3,455	17,174
1985	46,498	371	766	38	86	3,182	50,933	47,841	813	48,654	1,824	4,103	21,277
1986	53,020	364	566	40	-714 10/	3,167	56,442	49,018	667	49,685	10,613	17,370	38,648
1987	57,820	368	447	40	94	3,982	62,751	49,967	836	50,803		11,949	50,596
1988	61,901	364	475	42	80	5,148	68,010	52,022	707	52,730		15,281	65,877
1989	67,527	379	515	42	86	6,567	75,116	57,433	805	58,238		16,878	82,755
1990	70,655	367	413	113	107	7,908	79,563	65,912	774	66,687		12,876	95,631
Projection 11/:													
1991	75,104	363	605	325	-1,011 12/	9,108	84,494	69,127	1,051	70,178		14,316	109,947
1992	82,830	365	621	499	88	10,244	94,647	76,010	1,135	77,145		17,502	127,449
1993	89,004	370	337	550	85	11,479	101,825	82,588	1,221	83,809		18,016	145,465

1/ Fiscal years 1976 and earlier consist of the 12 months ending on June 30 of each year; the three-month interval from July 1, 1976, through September 30, 1976, labeled "T.Q.," is the transition quarter; fiscal years 1977 and later consist of the 12 months ending on September 30 of each year.
2/ Other income includes recoveries of amounts reimbursed from the trust fund which are not obligations of the trust fund and a small amount of miscellaneous income.
3/ Includes costs of Peer Review Organizations (beginning with the implementation of the Prospective Payment System on October 1, 1983).
4/ Includes costs of experiments and demonstration projects.
5/ A negative amount is a loan to the OASI trust fund; a positive amount is a repayment of loan principal to the HI trust fund.
6/ The 1977 transfer is for benefits and administrative expenses during the five-quarter period covering the transition quarter and fiscal year 1977.
7/ The 1978 transfer is for contributions during the five-quarter period covering the transition quarter and fiscal year 1977.
8/ Includes $2 million in reimbursement from general revenues for costs arising from the granting of deemed wage credits to persons of Japanese ancestry who were interned during World War II.
9/ Includes the lump sum general revenue transfer of $3,456 million, as provided for by section 151 of P.L. 98-21.
10/ Includes the lump sum general revenue adjustment of -$805 million, as provided for by section 151 of P.L. 98-21.
11/ Under alternative II.
12/ Includes the lump sum general revenue adjustment of -$1,100 million, as provided for by section 151 of P.L. 98-21.

NOTE: Totals do not necessarily equal the sums of rounded components.

TABLE 6.--OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND DURING CALENDAR YEARS 1966-93
(In millions)

Calendar year	Income							Disbursements				Trust fund	
	Payroll taxes	Transfers from railroad retirement account	Reimbursement for uninsured persons	Premiums from voluntary enrollees	Payments for military wage credits	Interest on investments and other income 1/	Total income	Benefits payments 2/	Administrative expenses 3/	Total disbursements	Interfund borrowing transfers 4/	Net increase in fund	Fund at end of year
Historical Data:													
1966	$1,858	$16	$26		$11	$32	$1,943	$891	$108	$999		$944	$944
1967	3,152	44	301		11	51	3,559	3,353	77	3,430		129	1,073
1968	4,116	54	1,022		22	74	5,287	4,179	99	4,277		1,010	2,083
1969	4,473	64	617		11	113	5,279	4,739	118	4,857		422	2,505
1970	4,881	66	863		11	158	5,979	5,124	157	5,281		698	3,202
1971	4,921	66	503		48	193	5,732	5,751	150	5,900		-168	3,034
1972	5,731	63	381		48	180	6,403	6,318	185	6,503		-99	2,935
1973	9,944	99	451	$2	48	278	10,821	7,057	232	7,289		3,532	6,467
1974	10,844	132	471	5	48	523	12,024	9,099	272	9,372		2,652	9,119
1975	11,502	138	621	7	48	664	12,980	11,315	266	11,581		1,399	10,517
1976	12,727	143	0 5/	9	141	746	13,766	13,340	339	13,679		88	10,605
1977	14,114	0 6/	803 5/	12	143 7/	784	15,856	15,737	283	16,019		-163	10,442
1978	17,324	214 6/	688	13	141	834	19,213	17,682	496	18,178		1,035	11,477
1979	20,768	191	734	16	141	975	22,825	20,623	450	21,073		1,751	13,228
1980	23,848	244	697	18	141	1,149	26,097	25,064	512	25,577		521	13,749
1981	32,959	276	659	22	207	1,603	35,725	30,342	384	30,726		4,999	18,748
1982	34,586	351	808	24	207	2,022	37,998	35,631	513	36,144	-$12,437	-10,583	8,164
1983	37,259	358	878	27	3,456 8/	2,593	44,570	39,337	540	39,877		4,693	12,858
1984	42,268	351	752	33	250	3,046	46,720	43,257	629	43,887		2,834	15,691
1985	47,576	371	766	41	-719 9/	3,362	51,397	47,580	834	48,414	1,824	4,808	20,499
1986	54,583	364	566	43	91	3,619	59,267	49,758	664	50,422	10,613	19,458	39,957
1987	58,648	368	447	38	94	4,469	64,064	49,496	793	50,289		13,775	53,732
1988	62,449	364	475	41	80	5,830	69,239	52,517	815	53,331		15,908	69,640
1989	68,369	379	515	55	86	7,317	76,721	60,011	792	60,803		15,918	85,558
1990	72,013	367	413	122	-993 10/	8,451	80,372	66,239	758	66,997		13,375	98,933
Projection 11/:													
1991	78,407	363	605	448	89	9,590	89,502	71,601	1,073	72,674		16,828	115,761
1992	84,484	365	621	511	88	10,857	96,926	77,632	1,155	78,787		18,139	133,900
1993	90,175	370	337	562	85	12,085	103,614	84,501	1,243	85,744		17,870	151,770

1/ Other income includes recoveries of amounts reimbursed from the trust fund which are not obligations of the trust fund and a small amount of miscellaneous income.
2/ Includes costs of Peer Review Organizations (beginning with the implementation of the Prospective Payment System on October 1, 1983).
3/ Includes costs of experiments and demonstration projects.
4/ A negative amount is a loan to the OASI trust fund; a positive amount is a repayment of loan principal to the HI trust fund.
5/ No transfer is made in 1976 because of the change in transfer dates from December to March. The 1977 transfer is for benefits and administrative expenses during the 15-month period beginning July 1976 and ending September 1977.
6/ No transfer is made in 1977 because of the change in transfer dates from August to June. The 1978 transfer is for contributions during the 15-month period beginning July 1976 and ending September 1977.
7/ Includes $2 million in reimbursement from general revenues for costs arising from the granting of deemed wage credits to persons of Japanese ancestry who were interned during World War II.
8/ The lump sum general revenue transfer, as provided for by section 151 of P.L. 98-21.
9/ Includes the lump sum general revenue adjustment of -$805 million, as provided for by section 151 of P.L. 98-21.
10/ Includes the lump sum general revenue adjustment of -$1,100 million, as provided for by section 151 of P.L. 98-21.
11/ Under alternative II.

NOTE: Totals do not necessarily equal the sums of rounded components.

TABLE 7.--RATIO OF ASSETS IN THE FUND AT THE BEGINNING OF THE YEAR TO DISBURSEMENTS DURING THE YEAR FOR THE HOSPITAL INSURANCE TRUST FUND
(In percent)

Calendar year	Ratio
Historical data:	
1967	28%
1968	25
1969	43
1970	47
1971	54
1972	47
1973	40
1974	69
1975	79
1976	77
1977	66
1978	57
1979	54
1980	52
1981	45
1982	52
1983	20
1984	29
1985	32
1986	41
1987	79
1988	101
1989	115
1990	128
Projection 1/:	
1991	136
1992	147
1993	156

1/ Under alternative II.

ACTUARIAL STATUS OF THE TRUST FUND

In the previous section, entitled "Expected Operations and Status of the Trust Fund During the Period October 1, 1990 to December 31, 1993," the expected operations of the HI program for the next three years, under the alternative II (intermediate) assumptions, were presented. In this section, the actuarial status of the trust fund, or the adequacy of the scheduled financing to support program costs well into the future, is examined, under the alternative II assumptions and two alternative sets of assumptions. As stated in the previous section, the assumptions underlying alternative II, the intermediate projection, are presented in appendix A. The assumptions used in preparing projections under the two alternative sets of assumptions are also summarized in appendix A.

The adequacy of the current law financing schedule for the HI program on a long-range basis is measured by comparing on a year-by-year basis the tax rates specified by law with the corresponding incurred costs of the program, expressed as percentages of taxable payroll. If these two items are exactly equal in each year of the projection period and all projection assumptions are realized, tax revenues will be sufficient to provide for program costs. In practice, however, tax rate schedules generally are designed with rate changes occurring only at intervals of several years, rather than with continual yearly increases to match exactly with projected cost increases. To the extent that small differences between the yearly costs of the program and the corresponding tax rates occur for short periods of time and are offset by subsequent differences in the reverse direction, the substance of the financing objectives will have been met. In projecting costs under the program, only incurred expenditures (benefits and administrative costs) attributable to insured beneficiaries are considered, since benefits and administrative costs for noninsured persons are expected to be financed through general revenue transfers and premium payments rather than through payroll taxes.

The historical costs of the HI program, expressed as percentages of taxable payroll, are shown in table 8. The ratio of expenditures to taxable payroll has increased from 0.94 percent in 1967 to 2.65 percent in 1990, reflecting both the higher rate of increase in program costs than in earnings subject to HI taxes and the extension of HI benefits to disabled and end-stage renal disease beneficiaries. The projected costs of the program under alternative II, expressed as percentages of taxable payroll, and the tax rates scheduled under current law for selected years over the 75-year period 1991-2065, are shown in table 9. Further increases in the ratio of expenditures to taxable payroll under alternative II result from the projection that the cost of the HI program will continue to increase at a higher rate than taxable earnings, as discussed later in this section. It can be seen from the selected years shown in table 9 that, on a year-by-year basis, the tax rates specified by current law are insufficient to support the costs of the current program.

While the year-by-year comparisons discussed are necessary to measure the adequacy of the financing of the HI program, the financial status of the program is often summarized, over a specific projection period, by a single measure known as the actuarial balance. The actuarial balance of the HI program is defined to be the excess of the summarized tax rate for the valuation period over the summarized cost rate (insured, incurred costs expressed as a percentage of taxable payroll) of the program for the same period. The present-value method (referred to as the level-financing method in the 1990 report) is used to calculate summarized cost rates, tax rates, and actuarial balances in this report, unless otherwise indicated. This approach is the same as that used in the OASDI report. Under the present-value method, the summarized tax rates, cost rates, and actuarial balance are based upon the present values of future income attributable to taxes on an incurred basis, future

insured costs on an incurred basis, and future taxable payroll. The present values are calculated by discounting the future annual amounts, at the assumed rates of interest credited to the HI trust fund, to the beginning of the valuation period. The summarized tax and cost rates over the projection period are then obtained by dividing the present value of the taxable payroll into the present values of tax income and cost, respectively. The difference between the summarized tax rate and cost rate over the long-range projection period, after an adjustment to take into account the fund balance at the valuation date and any target trust fund at the end of the valuation period, is computed to obtain the actuarial balance. In last year's report, the target trust fund balance at the end of the 75-year projection period was zero. This year, in keeping with the decision by the Board of Trustees that it is advisable to maintain a balance in the trust fund equal to a minimum of one year's expenditures, the target trust fund balance is equal to the following year's estimated costs at the end of the 75-year projection period. It should be noted that projecting an end-of-period target trust fund balance does not necessarily insure that the trust fund will maintain such a balance on a year-by-year basis.

The present-value method of calculating actuarial balances is a generally accepted method for summarizing the long-term financial status of the HI program and does not presume any particular financing method. The OASDI report also employs the present-value method in summarizing the long-term financial status of the Social Security programs. The actuarial balance computed under the present-value method represents the percentage that could be added to the current law tax rates and/or subtracted from the current law cost rates throughout the entire valuation period in order for the financing to support program costs and provide for the targeted trust fund balance at the end of the projection period. Calculating the actuarial balance under the present-value method is the best way of summarizing actuarial status and, accordingly, is the method adopted by the Board. The program's actuarial status can also be summarized using other methods. The actuarial balances as calculated under an alternative basis known as the modified average-cost method and a description of that methodology are presented in appendix B.

Since future economic, demographic, and health care usage and cost experience may differ considerably from the intermediate assumptions on which the cost estimates were based, projections have also been prepared on the basis of two alternative sets of assumptions, labeled "Alternative I" and "Alternative III." As previously stated, the assumptions used in preparing projections under alternatives I and III, as well as under alternative II, are discussed in appendix A.

The three alternative sets of assumptions were selected in order to indicate the general range in which the cost of the program reasonably might be expected to fall. The alternative I assumptions are somewhat more optimistic than the alternative II assumptions, resulting in a lower average cost over the projection period and a stronger trust fund development. The alternative III assumptions are somewhat more pessimistic than the alternative II assumptions, resulting in a higher average cost over the projection period and a weaker trust fund development. Alternative III thus reflects the possible impact, in the near future, of conditions which are significantly more adverse than those assumed under the intermediate assumptions. Alternatives I and III provide for a fairly wide range of possible experience. Actual experience reasonably may be expected to fall within the range, but no assurance can be made that this will be the case, particularly in light of the wide variations in experience that have occurred since the beginning of the program. The projected trust fund development under alternative III also provides a measure of the strength of the financing of the program. An adequate financing schedule ought to be sufficiently strong to withstand, for a reasonable period of time, conditions in the general

economy and in the hospital sector which are substantially more adverse than anticipated under alternative II.

The actuarial balances under all three alternative sets of assumptions, for the first 25-year period, the first 50-year period, the entire 75-year period 1991-2065, and for each 25-year subperiod, are shown in table 10. The summarized tax rate, for the entire 75-year period, is 2.90 percent. The summarized cost of the program under alternative II, for the entire 75-year period, is 6.25 percent of taxable payroll. The trust fund does not meet the new long-range test of financial adequacy, which is described in the OASDI report, under any of the three assumption sets.

The divergence in outcomes among the three alternatives is reflected both in the estimated operations of the trust fund on a cash basis (as discussed later in this section) and in the 75-year summarized costs. The variations in the underlying assumptions, as shown in appendix A, can be characterized as (1) moderate in terms of magnitude of the differences on a year-by-year basis, and (2) persistent over the duration of the projection period. During the first 25-year projection period, under the intermediate assumptions, program expenditures are projected to increase faster than taxable payroll, at a rate which gradually declines to about 2.5 percent more per year than taxable payroll by 2010. However, program expenditures are expected to grow at a rate over 3.5 percent more than taxable payroll for alternative II in 2015, the last year of the first 25-year projection period. This is just after the major demographic shift, as described below, begins. Under alternative I, program expenditures are also projected to increase faster than taxable payroll, but at a somewhat lower rate, which gradually declines to about one percent more per year than taxable payroll by 2010; the rate then increases, reaching almost two percent more per year than taxable payroll in 2015. Similarly, alternative III follows a pattern whereby program expenditures initially increase faster than taxable payroll and at a somewhat higher rate than the intermediate assumptions, gradually declining to about 4.5 percent more than taxable payroll by 2010, and then increasing to about 5.5 percent more than taxable payroll in 2015. Past experience has indicated that conditions producing results as adverse as those under alternative III can occur. In view of this and because of the wide range of possible experience, it is important that a balance be maintained in the HI trust fund as a reserve for contingencies.

A valuation period of 75 years is needed to present fully the future contingencies that reasonably may be expected to occur, such as the impact of the large shift in the demographic composition of the population which occurs after the turn of the century. As table 9 indicates, estimated expenditures under the program, expressed as percentages of taxable payroll, increase rapidly during the second 25 years of the projection period. This rapid increase in costs occurs because the relatively large number of persons born during the period between the end of World War II and the early 1960's (known as the "baby boom") will reach retirement age and begin to receive benefits, while the relatively small number of persons born during later years will comprise the labor force. During the last 25 years of the projection period, the projected increases in expenditures under the program stabilize.

Costs beyond the initial 25-year projection period for alternative II are based upon the assumption that costs per unit of service will gradually decline to increase at the same rate as earnings increase. Thus, changes in the last fifty years of the projection period primarily reflect the impact of the changing demographic composition of the population. Costs beyond the initial 25-year projection period for alternatives I and III begin by assuming that program cost increases, relative to taxable payroll increases, are

approximately two percent less rapid and two percent more rapid, respectively, than the results under the intermediate assumptions. The two percent differentials gradually decrease until the year 2040 when program cost increases, relative to taxable payroll, are approximately the same as under the intermediate assumptions.

The 75-year actuarial balance of the HI program, under alternative II, is estimated to be -3.35, as shown in table 10. The actuarial balance under alternative II-B as reported in the 1990 Annual Report was -3.26. The major reasons for the change in the 75-year actuarial balance are summarized in table 12. In more detail, these changes are:

(1) Changes in valuation period: Deletion of 1990 and the addition of 2065 to the 75-year projection period substitutes a deficit year for a surplus year with respect to the operations of the HI trust fund. The net effect on the actuarial balance is -0.09.

(2) Legislation since the 1990 report: Major legislative changes were enacted since the 1990 report. These are described in the "Social Security Amendments Since the 1990 Report" section in this report. The net effect of all legislative changes is +0.68.

(3) Economic and demographic assumptions: Changes in the economic and demographic assumptions described in appendix A result in a -0.22 change in the actuarial balance. Projections of the population covered by the program are higher than in the 1990 report, while the effects of most economic assumptions are lower.

(4) Updating the projection base: The cost as a percent of payroll for 1990 was more than estimated in the 1990 report. The net effect of this change on the actuarial balance is -0.22.

(5) Hospital assumptions: Changes in the hospital assumptions described in appendix A result in a -0.15 change in the actuarial balance. The primary factor contributing to the change is longer continuations of the cuurrenttrends toward treating less complicated (and thus less expensive) cases in outpatient settings, resulting in an increase in the average prospective payment per admission.

(6) Change to require ending target trust fund balance to equal the next year's estimated disbursement.: Recognizing this amount results in a -0.09 change in the actuarial balance.

The estimated operations of the HI trust fund during calendar years 1990-2015, on a cash basis for all program income and disbursements, are summarized in table 11 for all three alternatives. Under alternative II, the trust fund as a percent of a year's disbursements is projected to increase until 1995 and then decline steadily until it is completely exhausted in 2005. Under alternative I, the trust fund is projected to remain solvent throughout the first 25-year projection period, with trust fund exhaustion occurring in 2018. Under alternative III, the trust fund as a percent of a year's disbursements is projected to increase to a level of about 146 percent in 1993 and then decrease rapidly until the fund is exhausted in 2001. These projections do not reflect any reduction in disbursements due to proposed changes in legislation or regulation which were included in the 1992 Federal Budget but which have not been enacted or implemented.

In this year's report, a new test of the financial condition of the trust fund is explicitly included for the first time. This test of financial adequacy is applied to the short-range projection period encompassing the next 10 years. In order to meet this short-range test, the ratio of estimated assets in the trust fund at the beginning of the year to estimated disbursements during that year must either (a) be at least 100 percent throughout the 10-year projection period, or (b) reach a level of 100 percent within five years and remain at or above 100 percent throughout the remainder of the 10-year period. In addition, the fund's estimated assets at the beginning of each month of the 10-year period must be sufficient to cover that month's estimated disbursements. This test is applied to the

estimates under alternative II. Failure of the trust fund to meet this test is an indication that the solvency of the program over the next 10 years is in question and that action is needed to improve the short-range financial adequacy of the program. As can be seen from Table 11, this short-range test is met under the alternative II assumptions. The trust fund ratio is above the 100 percent level throughout the first 10 years of the projection period. However, it should be noted that the trust fund ratio drops below the 100 percent level in the eleventh year of the projection period and is expected to be exhausted shortly thereafter.

TABLE 8.--COST OF THE HOSPITAL INSURANCE PROGRAM, EXPRESSED AS A PERCENT OF TAXABLE PAYROLL

Calendar year	Expenditures under the program 1/
1967	0.94%
1968	1.04
1969	1.12
1970	1.20
1971	1.32
1972	1.30
1973	1.33
1974	1.42
1975	1.69
1976	1.83
1977	1.95
1978	2.01
1979	1.99
1980	2.19
1981	2.39
1982	2.65
1983	2.67 2/
1984	2.64
1985	2.64
1986	2.57
1987	2.53
1988	2.52
1989	2.62
1990	2.65

1/ Estimated costs attributable to insured beneficiaries only, on an incurred basis. Benefits and administrative costs for noninsured persons are expected to be financed through general revenue transfers and premium payments, rather than through payroll taxes. Gratuitous credits for military service after 1956 are included in taxable payroll.

2/ Deemed credits for military service before 1984 were attributed to the year in which such service had occurred. If all such credits had been attributed in 1983, expenditures under the program in 1983 would have been lower by 0.18 percent of taxable payroll.

TABLE 9.--COST AND TAX RATES OF THE HOSPITAL INSURANCE PROGRAM, EXPRESSED AS A PERCENT OF TAXABLE PAYROLL

Calendar year	Expenditures under the program 1/	Tax rates scheduled in the law 2/	Difference 3/
1991	2.61%	2.90%	0.29%
1992	2.68	2.90	0.22
1993	2.76	2.90	0.14
1994	2.87	2.90	0.03
1995	2.99	2.90	-0.09
2000	3.52	2.90	-0.62
2005	3.98	2.90	-1.08
2010	4.56	2.90	-1.66
2015	5.45	2.90	-2.55
2020	6.20	2.90	-3.30
2025	7.08	2.90	-4.18
2030	7.84	2.90	-4.94
2035	8.32	2.90	-5.42
2040	8.55	2.90	-5.65
2045	8.63	2.90	-5.73
2050	8.72	2.90	-5.82
2055	8.85	2.90	-5.95
2060	9.07	2.90	-6.17
2065	9.30	2.90	-6.40

1/ Estimated costs attributable to insured beneficiaries only, on an incurred basis,under alternative II. Benefits and administrative costs for noninsured persons are expected to be financed through general revenue transfers and premium payments, rather than through payroll taxes. Gratuitous credits for military service after 1956 are included in taxable payroll.
2/ Rates for employees and employers combined.
3/ Difference between the tax rate scheduled in the law and program expenditures.

TABLE 10.--ACTUARIAL BALANCES OF THE HOSPITAL INSURANCE PROGRAM, UNDER ALTERNATIVE SETS OF ASSUMPTIONS

	Alternative		
	I	II	III
Projection periods:			
1991-2015:			
Summarized tax rate 1/	2.90%	2.90%	2.90%
Summarized cost rate 2/	3.03	3.86	5.06
Actuarial balance 3/	-0.13	-0.96	-2.16
1991-2040:			
Summarized tax rate 1/	2.90	2.90	2.90
Summarized cost rate 2/	3.48	5.39	8.86
Actuarial balance 3/	-0.58	-2.49	-5.96
1991-2065:			
Summarized tax rate 1/	2.90	2.90	2.90
Summarized cost rate 2/	3.71	6.25	10.93
Actuarial balance 3/	-0.81	-3.35	-8.03
25-year subperiods:			
1991-2015:			
Summarized tax rate 1/	2.90%	2.90%	2.90%
Summarized cost rate 4/	3.06	3.82	4.91
Actuarial balance 3/	-0.16	-0.92	-2.01
2016-2040:			
Summarized tax rate 1/	2.90	2.90	2.90
Summarized cost rate 4/	4.03	7.28	13.45
Actuarial balance 3/	-1.13	-4.38	-10.55
2041-2065:			
Summarized tax rate 1/	2.90	2.90	2.90
Summarized cost rate 4/	4.53	8.84	17.53
Actuarial balance 3/	-1.63	-5.94	-14.63

1/ As scheduled under present law.

2/ Expenditures for benefit payments and administrative costs for insured beneficiaries, on an incurred basis, expressed as a percentage of taxable payroll, computed on the present-value basis, including the cost of attaining a trust fund balance at the end of the period equal to 100% of the following year's estimated expenditures, and including an offset to cost due to the beginning trust fund balance.

3/ Difference between the summarized tax rate (as scheduled under present law) and the summarized cost rate.

4/ Expenditures for benefit payments and administrative costs for insured beneficiaries, on an incurred basis, expressed as a percentage of taxable payroll, computed on the present-value basis. Includes neither the trust fund balance at the beginning of the period nor the cost of attaining a non-zero trust fund balance at the end of the period.

TABLE 11.--ESTIMATED OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND DURING CALENDAR YEARS 1990-2015, UNDER ALTERNATIVE SETS OF ASSUMPTIONS
(Dollar amounts in billions)

Calendar year	Total income	Total disbursements	Net increase in fund	Fund at end of year	Ratio of assets to disbursements 1/ (percent)
ALTERNATIVE I					
1990 2/	$ 80.4	$ 67.0	$ 13.4	$ 98.9	128
1991	89.8	72.5	17.3	116.3	136
1992	97.3	77.2	20.1	136.3	150
1993	104.1	82.7	21.5	157.8	165
1994	111.3	89.9	21.4	179.2	176
1995	118.4	97.5	20.9	200.1	184
2000	158.4	142.8	15.6	289.6	192
2005	203.8	194.4	9.4	347.1	174
2010	258.9	265.4	-6.5	353.1	135
2015	318.1	373.6	-55.5	191.0	66
ALTERNATIVE II					
1990 2/	$ 80.4	$ 67.0	$ 13.4	$ 95.9	128
1991	89.5	72.7	16.8	115.8	136
1992	96.9	78.8	18.1	133.9	147
1993	103.6	85.7	17.9	151.8	156
1994	110.4	94.7	15.7	167.5	160
1995	117.1	104.3	12.8	180.3	161
1996	124.1	115.4	8.7	189.0	156
1997	130.9	126.8	4.1	193.1	149
1998	137.9	138.9	-1.0	192.1	139
1999	144.9	152.1	-7.2	184.9	126
2000	151.9	166.3	-14.4	170.5	111
2001	156.9	180.4	-23.5	147.0	95
2002	163.2	195.3	-32.2	114.8	75
2003	169.4	211.2	-41.8	73.0	54
2004	175.5	228.6	-53.1	19.8	32
2005	181.5	247.4	-65.9	3/	8
ALTERNATIVE III					
1990 2/	$ 80.4	$ 67.0	$ 13.4	$ 98.9	128
1991	88.5	72.7	15.8	114.7	136
1992	94.8	79.5	15.3	130.0	144
1993	102.6	88.9	13.7	143.7	146
1994	110.0	100.4	9.6	153.3	143
1995	114.2	111.1	3.1	156.4	138
1996	121.5	125.6	-4.1	152.3	125
1997	128.8	141.9	-13.1	139.2	107
1998	135.1	159.2	-24.2	115.0	87
1999	140.4	178.1	-37.7	77.3	65
2000	145.1	198.7	-53.6	23.7	39
2001	146.8	219.4	-72.6	4/	11

1/ Ratio of assets in the trust fund at the beginning of the year to disbursements during the year.
2/ Figures for 1990 represent actual experience.
3/ Trust fund depleted in calendar year 2005.
4/ Trust fund depleted in calendar year 2001.

NOTE: Totals do not necessarily equal the sums of rounded components.

Table 12.--CHANGE IN THE 75-YEAR ACTUARIAL BALANCE SINCE THE 1990 REPORT

1. Actuarial balance, alternative II-B, 1990 report 1/	-3.26%
2. Changes:	
a. Valuation period	-0.09
b. Base estimate	-0.22
c. Legislation since the 1990 report	+0.68
d. Economic and demographic assumptions	-0.22
e. Hospital assumptions	-0.15
f. Definitional change 2/	-0.09
g. Net effect, above changes	-0.09
3. Actuarial balance, alternative II, 1991 report 3/	-3.35

1/ The actuarial balance in the 1990 report was computed on the present-value basis (then referred to as the level-financing basis), including an offset to cost due to the beginning trust fund balance but without the cost of attaining a non-zero trust fund balance at the end of the period.

2/ The definitional change is the inclusion of the cost of attaining a trust fund balance at the end of the period equal to 100% of the following year's estimated expenditures; see 1/ and 3/.

3/ The actuarial balance in the 1991 report is computed on the present-value basis, including the cost of attaining a trust fund balance at the end of the period equal to 100% of the following year's estimated expenditures, and including an offset to cost due to the beginning trust fund balance.

CONCLUSION

The balance in the Federal Hospital Insurance Trust Fund at the beginning of 1991 was 136 percent of estimated outgo for calendar year 1991, above the minimum 100 percent level recommended by the Board of Trustees. The trust fund meets the new short-range test of financial adequacy, which is described in the previous section of this report, and the tax rates specified in the law are sufficient, along with interest earnings and assets in the fund, to support program expenditures over the next 14 years, under the intermediate assumptions. However, any significant adverse deviation from these projections could result in the inability of the fund to meet its obligations much sooner than projected.

Over the 75-year projection period, the tax rate necessary to provide for benefits and administrative expenses exceeds the tax rate scheduled in the law in most years. The actuarial balance, as defined in the previous section (that is, including the cost of attaining a trust fund balance at the end of the period equal to 100% of the following year's estimated expenditures, and including an offset to cost due to the beginning trust fund balance), is -0.96 for the first 25-year projection period, -2.49 for the first 50-year projection period, and -3.35 over the entire 75-year projection period, under the alternative II assumptions. The actuarial balances for the 25-year subperiods, as defined in the previous section (that is, including neither the trust fund balance at the beginning of the period nor the cost of attaining a non-zero trust fund balance at the end of the subperiod), are -0.92, -4.38, and -5.94 for the first, second, and third 25-year subperiods, respectively, under the alternative II assumptions. The trust fund does not meet the new long-range test of financial adequacy, which is defined in the OASDI report, under any of the three assumption sets. In order to bring the HI program into actuarial balance even for the first 25-year projection period under the alternative II assumptions, either outlays will have to be reduced by 25 percent or income increased by 33 percent (or some combination thereof).

There are currently over four covered workers supporting each HI enrollee. This ratio will begin to decline rapidly early in the next century. By the middle of that century, there will be only about two covered workers supporting each enrollee. As the post-World War II "baby boom" becomes eligible for benefits, the annual increase in program costs as a percentage of taxable payroll rises dramatically, from 2.6 percent in 2010 to 3.7 percent in 2015 under alternative II (see appendix A). Not only are the anticipated reserves and financing of the HI program inadequate to offset this demographic change, but under all but the most optimistic assumptions, the HI trust fund is projected to become exhausted even before the major demographic shift begins to occur. Exhaustion is projected to occur shortly after the turn of the century, in 2005 under the alternative II assumptions, and could occur as early as 2001 if the pessimistic assumptions are realized.

The Board notes that promising steps to begin reducing the rate of growth in payments to hospitals have been taken, including the implementation of prospective payment and diagnosis-related groups. Initial experience under the prospective payment system for hospitals suggests that this payment mechanism can be an effective means of constraining the growth in hospital payments and improving the efficiency of the hospital industry. Efforts focused on improving the efficiency and reducing the costs of the health care delivery system need to be continued, in close combination with mechanisms that will assure that the quality of health care is not adversely affected.

Even though the HI trust fund is financially adequate based on the short-range test, because of the magnitude of the projected actuarial deficit in the HI program and the high probability that the HI trust fund will be exhausted shortly after the turn of the century,

the Board believes that corrective action will be needed very soon in order to avoid the need for potentially precipitous changes later.

APPENDIX A

ACTUARIAL METHODOLOGY AND PRINCIPAL ASSUMPTIONS FOR THE HOSPITAL INSURANCE COST ESTIMATES

This appendix describes the basic methodology and assumptions used in the estimates for the HI program under the intermediate (alternative II) assumptions. In addition, sensitivity testing of program costs under two alternative sets of assumptions is presented.

1. ASSUMPTIONS

The alternative II economic assumptions used in the estimates can generally be characterized as assuming that economic performance will be substantially more favorable during the 75-year valuation period than during the last 25 years. Both the economic and demographic assumptions underlying the projections shown in this report are consistent with those in the 1991 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance (OASDI) Trust Funds. These assumptions are described in more detail in that report.

2. PROGRAM COST PROJECTION METHODOLOGY

The principal steps involved in projecting the future costs of the HI program are (1) establishing the present cost of services provided to beneficiaries, by type of service, to serve as a projection base; (2) projecting increases in payment amounts for inpatient hospital services under the program; (3) projecting increases in payment amounts for skilled nursing facility, home health agency, and hospice services covered under the program; and (4) projecting increases in administrative costs. The major emphasis is directed toward expenditures for inpatient hospital services, which account for approximately 90 percent of total benefits.

a. Projection Base

In order to establish a suitable base from which to project the future costs of the program, the incurred payments for services provided must be reconstructed for the most recent period for which a reliable determination can be made. To do this, payments to providers must be attributed to dates of service, rather than to payment dates. In addition, the nonrecurring effects of any changes in regulations, legislation, or administration of the program and of any items affecting only the timing and flow of payments to providers must be eliminated. As a result, the rates of increase in the incurred cost of the program differ from the increases in cash disbursement shown in tables 5 and 6.

For those expenses still reimbursed on a reasonable cost basis, the costs for covered services are determined on the basis of provider cost reports. Payments to a provider initially are made on an interim basis; to adjust interim payments to the level of retroactively determined costs, a series of payments or recoveries is effected through the course of cost settlement with the provider. The net amounts paid to date to providers in the form of cost settlements are known; however, the incomplete data available do not permit a precise determination of the exact amounts incurred during a specific period of time. Due to the time required to obtain cost reports from providers, to verify these reports, and to perform audits (where appropriate), final settlements have lagged behind the liability for such payments of recoveries by as much as several years for some providers.

Hence, the final cost of services reimbursed on a reasonable cost basis has not been completely determined for the most recent years of the program, and some degree of uncertainty remains even for earlier years.

Even for inpatient hospital operating payments paid for on the basis of diagnosis-related groups (DRGs), most payments are initially made on an interim basis, and final payments are determined on the basis of bills containing detailed diagnostic information which are later submitted by the hospital.

Additional problems are posed by changes in legislation or regulation, or in administrative or reimbursement policy, which have a substantial effect on either the amount or incidence of payment. The extent and timing of the incorporation of such changes into interim payment rates and cost settlement amounts cannot be determined precisely.

The process of allocating the various types of payments made under the program to the proper incurred period--using incomplete data and estimates of the impact of administrative actions--presents difficult problems, the solutions to which can be only approximate. Under the circumstances, the best that can be expected is that the actual incurred cost of the program for a recent period can be estimated within a few percent. This increases the projection error directly, by incorporating any error in estimating the base year into all future years.

b. Payments for Inpatient Hospital Costs

Beginning with hospital accounting years starting on or after October 1, 1983, the HI program began paying almost all participating hospitals a prospectively-determined amount for providing covered services to beneficiaries. With the exception of certain expenses (such as capital-related and medical education expenses) reimbursed on a reasonable cost or per resident cost basis, as defined by law, the payment rate for each admission depends upon the DRG to which the admission belongs.

The law contemplates that the annual increase in the payment rate for each admission will be related to a hospital input price index, which measures the increase in prices for goods and services purchased by hospitals for use in providing care to hospital inpatients. In the "Social Security Amendments Since the 1990 Report" section of this report and in other literature, the hospital input price index is called the hospital market basket percentage increase. For fiscal years through 1991, the prospective payment rates have already been determined. The projections contained in this report are based on the assumption that for fiscal years 1992 through 1995, the prospective payment rates will be increased in accordance with Public Law 101-508, the Omnibus Budget Reconciliation Act of 1990, and these legislated annual payment rate increases are indeed functions of the annual hospital input price indices. For fiscal years 1996 and later, current statute mandates that the annual increase in the payment rate per admission equal the annual hospital input price index.

Increases in aggregate payments for inpatient hospital care covered under the HI program can be analyzed into four broad categories:

(1) Labor factors--the increase in the hospital input price index which is attributable to increases in hospital workers' hourly earnings;

(2) Non-labor factors--the increase in the hospital input price index which is attributable to factors other than hospital workers' hourly earnings, such as the costs of energy, food, and supplies;

(3) Unit input intensity allowance--the increase in inpatient hospital payments per admission which are in excess of those attributable to increases in the hospital input price index; and

(4) Volume of services--the increase in total output of units of service (as measured by hospital admissions covered by the HI program).

It has been possible to isolate some of these elements and to identify their roles in previous hospital payment increases. Table Al shows the estimated values of the principal components of the increases for historical periods for which data are available and the projected trends used in the estimates. The following discussions apply to projections under alternative II, unless otherwise indicated.

Increases in hospital workers' hourly earnings can be analyzed and projected in terms of the assumed increases in hourly earnings in employment in the general economy and the difference between hourly earnings increases in the general economy and the proxy for hospital hourly earnings used in the hospital input price index. Since the beginning of the HI program, the differential between the proxy for hospital workers' hourly earnings and hourly earnings in the general economy has fluctuated widely. Since 1975, this positive differential has averaged about 0.3 percent, as hospital workers' earnings have risen faster than general earnings. Several factors contributing to this differential can be identified, including (1) growth in third-party reimbursement of hospitals--through Medicare, Medicaid, and comprehensive private plans -- which is likely to have weakened hospital resistance to wage demands; (2) increased proportions of highly trained and more highly paid personnel; (3) an increased degree of labor organization and activity; and (4) the fact that hospital employees had historically earned less than similarly skilled workers in other industries. During the initial years of the prospective payment system, it appears that hospital hourly earnings were depressed relative to those in the general economy as hospitals adapted to the prospective payment system. This differential is assumed to grow to a level of one-half percent over the short term, declining to zero just after the end of the first 25-year projection period.

Increases in hospital price input intensity, which are primarily the result of price increases for non-labor goods and services that hospitals purchase which do not parallel increases in the Consumer Price Index (CPI), are measured as the difference between the non-labor component of the hospital input price index and the CPI. Although the level has fluctuated erratically in the past, this differential has averaged about one-half percent during 1975-1989. Over the short term, hospital price input intensity is assumed to remain at a level of one-half percent, declining to zero just after the end of the first 25-year period.

For years prior to the beginning of the prospective payment system, the unit input intensity allowance has been set at one percent for illustrative purposes, with historical increases in excess of one percent allocated to other sources. For years after the beginning of the prospective payment system, the unit input intensity allowance is the allowance provided for in the prospective payment update factor; that is, the unit unput intensity allowance is the amount added onto (or subtracted from) the input price index to yield the update factor. (It should be noted that the update factors are generally prescribed on a fiscal year basis, while table A1 is on a calendar year basis. Calculations have therefore

been performed to estimate the unit input intensity allowance on a calendar year basis.) For fiscal years 1991-1995, the allowances shown are prescribed in Public Law 101-508, as discussed in the "Social Security Amendments Since the 1990 Report" section. (Again, calculations were performed to show the unit input intensity allowance on a calendar year basis.) Beginning in fiscal year 1996, the law provides that future increases in payments to participating hospitals for covered admissions will equal the increase in the hospital input price index. Thus, the unit input intensity allowance, as indicated in table A1, is assumed to equal zero for the rest of the years in the first 25-year projection period.

Since the beginning of the prospective payment system, increases in inpatient hospital payments from other sources are primarily due to three factors: (1) the improvement in DRG coding as hospitals continue to adjust to the prospective payment system; (2) the trend toward treating less complicated (and thus, less expensive) cases in outpatient settings, resulting in an increase in the average prospective payment per admission; and (3) legislation affecting the payment rates. The effects of several budget reconciliation acts, sequesters as required by the Gramm-Rudman-Hollings Act, and other legislative effects are reflected in other sources as appropriate. Some of the expansions in hospital payments due to the Medicare Catastrophic Coverage Act of 1988, and the subsequent reductions in hospital payments due to the Medicare Catastrophic Coverage Repeal Act of 1989, are reflected in other sources for 1989 to 1991. A two percent increase for fiscal years 1991 through 2000 and a one percent increase for fiscal years 2001 through 2015 reflected in other sources are attributable to a continuation of the current trend toward treating less complicated cases in outpatient settings and continued improvement in DRG coding. Additionally, part of the increase from other sources can be attributed to the increase in payments for certain costs not included in the DRG payment; these costs are generally increasing at a rate faster than the input price index. Possible other sources of both relative increases and decreases in payments include (1) a shift to more or less expensive admissions (DRGs) due to changes in the demographic characteristics of the covered population; (2) changes in medical practice patterns; and (3) adjustments in the relative payment levels for various DRGs or addition/deletion of DRGs in response to changes in technology. As experience under the prospective payment system continues to develop and is further analyzed, it may be possible to establish a predictable trend for this component.

Other factors which contribute to increases in payments for inpatient hospital services include increases in units (volume) of service as measured by increases in inpatient hospital admissions covered under the HI program. Increases in admissions are attributable both to increases in enrollment under the HI program and to increases in admission incidence (admissions per beneficiary). The historical and projected increases in enrollment reflect the more rapid increase in the population aged 65 and over than in the total population of the United States, and the coverage of certain disabled beneficiaries and persons with end-stage renal disease. Increases in the enrollment are expected to continue, reflecting a continuation of the demographic shift into categories of the population which are eligible for HI protection. In addition, increases in the average age of beneficiaries lead to higher levels of admission incidence. Admission incidence levels are also often affected by changes in the laws and regulations that define and guide the HI program's coverage of inpatient hospital care.

c. Skilled Nursing Facility (SNF), Home Health Agency (HHA), and Hospice Costs

Historical experience with the number of days of care covered in SNFs under the HI program has been characterized by wide swings. The number of covered days dropped very sharply in 1970 and continued to decline through 1972. This was the result of strict

enforcement of regulations separating skilled nursing care from custodial care. Because of the small fraction of nursing home care covered under the program, this reduction primarily reflected the determination that Medicare was not liable for payment rather than reduced usage of services. The 1972 amendments extended benefits to persons who require skilled rehabilitative services regardless of their need for skilled nursing services (the former prerequisite for benefits). This change and subsequent related changes in regulations have resulted in significant increases in the number of services covered by the program. More recently, changes made in 1988 to coverage guidelines for SNF services resulted in about a 100 percent increase in utilization, and expansions and changes due to the Medicare Catastrophic Coverage Act of 1988, effective January 1, 1989, resulted in about another 45 percent increase in utilization of SNF services. The projections contained in this report reflect, for 1990, a reduction in utilization consistent with the SNF transition provisions of the Medicare Catastrophic Coverage Repeal Act of 1989 and, for 1991, the complete repeal of the catastrophic expansions and changes, as also mandated by the Act. Modest increases in covered days, based on growth and aging of the population, are projected for 1992 and later, and are included in the 1990 and 1991 estimates as well.

Increases in the average cost per day (where cost is defined to be the total of program reimbursement and beneficiary cost sharing) in skilled nursing facilities under the program are caused principally by increasing payroll costs for nurses and other required skilled labor. Projected rates of increase in cost per day are assumed to be about the same as increases in general earnings throughout the projection period, but adjustments to reflect regulations limiting SNF costs per day are included where appropriate. Increases in reimbursement per day reflect the changes in beneficiary cost sharing amounts, including those changes resulting from the catastrophic coverage and catastrophic coverage repeal legislation.

The resulting increases in expenditures for SNF services are shown in table A2.

Program experience with HHA payments has shown a generally upward trend. The number of visits had increased sharply from year to year, but some decreases, albeit small in magnitude relative to past increases, were experienced in the mid-1980's; these were followed by modest increases. Recently, however, large increases in the number of visits have occurred, and this trend is projected to continue through 1991. Modest increases, based on growth and aging of the population, are projected thereafter. Reimbursement per visit is assumed to increase at about the same rate as increases in general earnings, but adjustments to reflect regulations limiting HHA reimbursement per visit are included where appropriate. The resulting increases in expenditures for HHA services are shown in table A2.

Coverage of certain hospice care for terminally ill beneficiaries is a relatively new program benefit, resulting from the enactment of the Tax Equity and Fiscal Responsibility Act of 1982, and payments for hospice care are very small relative to total program benefit payments. Detailed hospice data is, at this time, scant, but increases in hospice benefit payments are estimated based on daily payment rates and annual payment caps, as mandated by law and regulation, and modest growth in the number of covered days. Increases in hospice payments are not shown seperately in table A2, due to its extremely small contribution to the weighted average increase for all HI types of service, but are included in the average.

d. Administrative Expenses

The costs of administering the HI program have remained relatively small, in comparison with benefit amounts, throughout the history of the program. The ratio of administrative expenses to benefit payments has generally fallen within the range of one to three percent. The short-range projection of administrative cost is based on estimates of workloads and approved budgets for intermediaries and the Health Care Financing Administration. In the long range, administrative cost increases are based on assumed increases in workloads, primarily due to growth and aging of the population, and on assumed unit cost increases of slightly less than the increases in average hourly earnings shown in table A1.

3. FINANCING ANALYSIS METHODOLOGY

In order to analyze costs and to evaluate the financing of a program supported by payroll taxes, program costs must be compared on a year-by-year basis with the taxable payroll which provides the source of income for these costs. Since the vast majority of total program costs are related to insured beneficiaries and since general revenue appropriations and premium payments are expected to support the uninsured segments, the remainder of this report will focus on the financing for insured beneficiaries.

a. Taxable Payroll

Taxable payroll increases can be separated into a part due to increases in covered earnings and a part due to increases in the number of covered workers. The taxable payroll projection used in this report is based on economic assumptions consistent with those used in the OASDI report. Increases in taxable payroll assumed for this report are shown in table A2.

b. Relationship Between Program Costs and Taxable Payroll

The single most meaningful measure of program cost increases, with reference to the financing of the system, is the relationship between program cost increases and taxable payroll increases. If the rates of increase in both series are the same, given that the current tax rate applied to taxable payroll is sufficient to support program costs, continuing that tax rate over time will be adequate to support the program. However, to the extent that program costs increase more rapidly than taxable payroll, either a schedule of increasing tax rates or a reduction in program costs (or some combination thereof) will be required to finance the system in the future. Table A2 shows the resulting increases in program costs relative to taxable payroll over the first 25-year projection period. These relative increases reduce gradually to a level of slightly above 2.5 percent per year by 2010, but increase to a level of about 3.5 percent per year by 2015 for alternative II, just after the post-World War II "baby boom" population starts becoming eligible for benefits. The result of these increases is a continued increase in the year-by-year ratios of program expenditures to taxable payroll, as shown in table A3.

4. SENSITIVITY TESTING OF COSTS UNDER ALTERNATIVE ASSUMPTIONS

Over the past 20 years, aggregate inpatient hospital costs for Medicare beneficiaries have increased substantially faster than increases in average earnings and prices in the general economy. Table A1 shows the estimated experience of the HI program for 1975 to 1989. As mentioned earlier, the HI program now makes payments to most participating

hospitals on a prospective basis (with the exception of certain expenses). Thus, the trends in aggregate HI inpatient hospital costs prior to 1983, as shown in the historical section of table A1, have little relation to the projected HI inpatient hospital payments. The prospective payment system has made the outlays of the HI program potentially less vulnerable to excessive rates of growth in the hospital industry. However, there is some uncertainty in projecting HI expenditures, for inpatient hospital services as well as the other covered types of services, due to the uncertainty of the underlying economic assumptions and utilization increases. In addition, there is uncertainty in projecting HI expenditures due to the possibility of future legislation affecting unit payment levels, particularly for inpatient hospital services. Current law statute is assumed throughout the estimates shown in this report, but legislation affecting the payment levels to hospitals has been enacted nearly annually for about the past ten years, and future legislation is probable.

In view of the uncertainty of future cost trends, projected costs for the HI program have been prepared under three alternative sets of assumptions. A summary of the assumptions and results is shown in table A3. The set of assumptions labeled "Alternative II" forms the basis for the detailed discussion of hospital cost trends and resulting program costs presented throughout this report. It represents intermediate cost increase assumptions, compared with the lower cost and more optimistic alternative I and the higher cost and less optimistic alternative III. Increases in the economic factors (average hourly earnings and CPI) for the three alternatives are consistent with those underlying the OASDI report.

As noted earlier, the single most meaningful measure of HI program cost increases, with reference to the financing of the system, is the relationship between program cost increases and taxable payroll increases. The extent to which program cost increases exceed increases in taxable payroll will determine how steeply tax rates must be increased or program costs curtailed to finance the system over time.

By the end of the first 25-year projection period, program costs are projected to increase about 3.5 percent faster per year than increases in taxable payroll for alternative II, as discussed in the "Financing Analysis Methodology" section of this appendix. Program costs beyond the first 25-year projection period are based on the assumption that costs per unit of service will gradually decline to increase at the same rate as earnings increase. Program expenditures, which were about 2.6 percent of taxable payroll in 1990, increase to a level above five percent by the year 2015 and to over nine percent by the year 2065 under alternative II. Hence, if all of the projection assumptions are realized over time, HI tax rates provided in the present financing schedule (2.9 percent of taxable payroll) will be grossly inadequate to support the cost of the program.

During the first 25-year projection period, alternatives I and III contain assumptions which result in program costs increasing, relative to taxable payroll increases, approximately two percent less rapidly and two percent more rapidly, respectively, than the results under the intermediate assumptions. Costs beyond the first 25-year projection period assume the two percent differential gradually decreases until the year 2040 when program cost increases relative to taxable payroll are approximately the same as under the intermediate assumptions. Under alternative I, program costs increase about 1.2 percent more per year than increases in taxable payroll during the first 25-year projection period. Program expenditures under this alternative would be about 3.6 percent of taxable payroll in the year 2015, increasing to about 4.8 percent of taxable payroll by 2065. The summarized program costs for the 75-year projection period are about 3.7 percent of taxable payroll; hence, HI tax rates provided in the present financing schedule will be inadequate even under the optimistic alternative I assumptions. Under alternative III, program costs increase about

4.7 percent more rapidly per year than increases in taxable payroll during the first 25-year projection period. The result of this differential is a level of program expenditures in the year 2015 which is about 8.4 percent of taxable payroll, increasing to about 18.5 percent of taxable payroll in the year 2065.

TABLE A1.--COMPONENTS OF HISTORICAL AND PROJECTED INCREASES IN HI INPATIENT HOSPITAL PAYMENTS 1/
(Percent)

Calendar year	Labor			Non-labor			Input price index	Unit input intensity allowance 2/	Units of service		Other sources	HI inpatient hospital payments
	Average hourly earnings	Hospital hourly earnings level	Hospital hourly earnings	CPI	Hospital price input intensity	Non-labor hospital prices			HI enrollment	Admission incidence		
Historical Data:												
1975	8.3%	0.5%	8.8%	9.2%	3.4%	12.9%	10.5%	1.0%	3.4%	0.1%	6.1%	22.5%
1976	8.0	-0.4	7.6	5.7	1.7	7.5	7.6	1.0	2.9	1.5	5.1	19.2
1977	6.9	-0.1	6.8	6.5	0.6	7.1	6.9	1.0	3.0	4.6	0.8	17.2
1978	8.1	-0.4	7.7	7.6	-0.8	6.7	7.3	1.0	2.7	-1.9	5.3	14.9
1979	8.7	-0.8	7.8	11.4	-1.1	10.2	8.8	1.0	2.7	3.1	0.2	16.5
1980	7.8	1.8	9.7	13.5	0.8	14.4	11.8	1.0	2.1	2.4	2.4	20.8
1981	9.2	1.0	10.3	10.3	-0.5	9.8	10.1	1.0	1.9	2.7	3.0	19.7
1982	5.6	3.1	8.9	6.0	0.3	6.3	7.7	1.0	1.8	0.0	4.6	15.7
1983	4.1	2.1	6.3	3.0	1.2	4.2	5.4	1.0	1.7	0.8	1.9	11.2
1984	5.9	-0.5	5.4	3.4	0.5	3.9	4.7	1.0	1.8	-3.8	7.6	11.4
1985	5.3	-0.9	4.4	3.5	-0.9	2.6	3.6	0.0	1.6	-7.4	8.4	5.7
1986	5.4	-1.6	3.7	1.6	0.5	2.1	3.0	-2.8	2.3	-4.2	6.7	4.8
1987	5.5	-1.3	4.1	3.6	-0.2	3.4	3.8	-2.7	1.7	-3.3	4.9	4.3
1988	5.1	-0.3	4.8	4.0	1.5	5.6	5.1	-2.6	1.7	-2.0	3.2	5.4
1989	3.1	1.7	4.9	4.8	0.6	5.4	5.1	-1.1	2.0	-1.7	2.1	6.5
Projection 3/:												
1990	4.0	0.7	4.7	5.3	-0.7	4.6	4.7	-0.1	2.0	0.1	1.5	8.4
1991	3.9	0.8	4.7	4.9	-1.0	3.9	4.4	-1.1	2.2	0.7	3.4	9.9
1992	4.8	-0.2	4.6	4.0	-0.3	3.7	4.2	-1.4	1.8	1.2	2.9	9.0
1993	5.0	0.5	5.5	4.0	0.5	4.5	5.1	-1.0	1.7	1.3	2.1	9.5
1994	5.1	0.5	5.6	4.0	0.5	4.5	5.2	0.2	1.6	1.3	2.0	10.7
1995	5.4	0.5	5.9	4.0	0.5	4.5	5.3	0.2	1.5	1.2	2.1	10.6
2000	5.4	0.5	5.9	4.0	0.5	4.5	5.4	0.0	1.1	1.0	1.6	9.4
2005	5.3	0.5	5.8	4.0	0.5	4.5	5.3	0.0	1.3	0.5	1.0	8.3
2010	5.3	0.5	5.8	4.0	0.5	4.5	5.3	0.0	1.8	0.2	1.1	8.6
2015	5.4	0.5	5.9	4.0	0.5	4.5	5.4	0.0	2.7	0.0	1.1	9.4

1/ Percent increase in year indicated over previous year, on an incurred basis.
2/ Reflects the allowances provided for in the prospective payment update factors.
3/ Under alternative II.

NOTE: Historical and projected data reflect a recalibration of the hospital input price index which occurred in 1986.

TABLE A2.--RELATIONSHIP BETWEEN INCREASES IN HI PROGRAM EXPENDITURES AND INCREASES IN TAXABLE PAYROLL 1/
(Percent)

Calendar year	Inpatient hospital 2/ 3/	Skilled nursing facility 3/	Home health agency 3/	Weighted average 3/ 4/	HI administrative costs 3/ 5/	HI program expenditures 3/	HI taxable payroll	Ratio of expenditures to payrolls 6/
1991	9.8%	0.2%	15.4%	9.9%	42.5%	10.4%	11.9%	-1.3%
1992	9.0	8.8	8.1	9.0	7.6	9.0	6.2	2.6
1993	9.6	8.6	8.1	9.6	7.6	9.5	6.5	2.8
1994	10.8	7.7	8.0	10.6	7.4	10.6	6.2	4.1
1995	10.7	7.5	7.9	10.5	7.3	10.4	6.2	4.0
2000	9.4	7.1	7.5	9.3	6.5	9.2	6.0	3.0
2005	8.3	6.9	7.1	8.2	6.2	8.2	5.9	2.2
2010	8.6	6.8	7.0	8.4	6.4	8.4	5.6	2.6
2015	9.4	7.0	7.2	9.2	7.2	9.2	5.4	3.7

1/ Percent increase in year indicated over previous year, under alternative II.
2/ This column may differ slightly from the last column of table A1, since table A1 includes all persons eligible for HI protection while this table excludes noninsured persons.
3/ Costs attributable to insured beneficiaries only, on an incurred basis. Benefits and administrative costs for noninsured persons are expected to be financed through general revenue transfers and premium payments, rather than through payroll taxes.
4/ Includes costs for hospice care.
5/ Includes costs of Peer Review Organizations.
6/ Percent increase in the ratio of program expenditures to taxable payroll. This is equivalent to the differential between the increase in program costs and the increase in taxable payroll.

NOTE: Taxable payroll is adjusted to take into account the lower contribution rates on multiple-employer "excess wages," as compared with the combined employer-employee rate.

TABLE A3.--SUMMARY OF ALTERNATIVE PROJECTIONS FOR THE HOSPITAL INSURANCE PROGRAM
(Percent)

Calendar year	Increases in aggregate HI inpatient hospital payments 1/				Changes in the relationship between expenditures and payroll 1/			Expenditures as a percent of taxable payroll 3/ 4/
	Average hourly earnings	CPI	Other factors 2/	Total 3/	Program expenditures 3/ 4/	Taxable payroll	Ratio of expenditures to payroll	
ALTERNATIVE I								
1991	3.8%	4.4%	5.0%	9.3%	9.9%	12.2%	-2.1%	2.59%
1992	4.2	2.8	3.2	6.9	7.1	6.1	0.9	2.62
1993	4.6	3.1	3.3	7.4	7.7	6.6	1.1	2.64
1994	4.7	3.0	4.6	8.8	8.9	6.4	2.3	2.71
1995	4.8	3.0	4.5	8.7	8.8	6.3	2.3	2.77
2000	4.9	3.0	3.0	7.3	7.4	6.0	1.3	2.99
2005	4.7	3.0	2.0	6.1	6.2	5.7	0.5	3.12
2010	4.7	3.0	1.9	6.1	6.2	5.3	0.9	3.28
2015	4.8	3.0	2.8	7.1	7.1	5.1	1.9	3.60
ALTERNATIVE II								
1991	3.9%	4.9%	5.3%	9.9%	10.4%	11.9%	-1.3%	2.61%
1992	4.8	4.0	4.3	9.0	9.0	6.2	2.6	2.68
1993	5.0	4.0	4.7	9.5	9.5	6.5	2.8	2.76
1994	5.1	4.0	5.8	10.7	10.6	6.2	4.1	2.87
1995	5.4	4.0	5.5	10.6	10.4	6.2	4.0	2.99
2000	5.4	4.0	4.3	9.4	9.2	6.0	3.0	3.52
2005	5.3	4.0	3.3	8.3	8.2	5.9	2.2	3.98
2010	5.3	4.0	3.6	8.6	8.4	5.6	2.6	4.56
2015	5.4	4.0	4.3	9.4	9.2	5.4	3.7	5.45
ALTERNATIVE III								
1991	3.4%	6.1%	5.3%	10.1%	10.4%	10.5%	0.0%	2.65%
1992	5.2	5.6	4.9	10.5	10.4	5.1	5.1	2.79
1993	7.2	6.4	5.3	12.5	12.4	8.3	3.9	2.90
1994	6.1	6.2	6.5	13.0	12.7	6.8	5.5	3.06
1995	4.5	4.8	6.7	11.6	11.2	3.9	7.0	3.27
2000	6.0	5.0	5.8	11.7	11.4	6.3	4.7	4.16
2005	6.0	5.0	4.9	10.8	10.5	6.2	4.0	5.14
2010	6.0	5.0	5.2	11.1	10.8	6.1	4.5	6.43
2015	6.0	5.0	5.9	11.9	11.7	5.7	5.6	8.43

1/ Percent increase in the year indicated over the previous year.
2/ Other factors include hospital hourly earnings, hospital price input intensity, unit input intensity allowance, units of service as measured by admissions, and other sources.
3/ On an incurred basis.
4/ Includes expenditures attributable to insured beneficiaries only.

NOTE: Taxable payroll is adjusted to take into account the lower contribution rates on multiple-employer "excess wages," as compared with the combined employer-employee rate.

APPENDIX B

ACTUARIAL BALANCE UNDER THE MODIFIED AVERAGE-COST METHOD

The section of this report entitled "Actuarial Status of the Trust Fund" presented the summarized tax rates, cost rates, and actuarial balances under the present-value method, and the present-value methodology was described. In this appendix, the same summary measures for the HI program, but under the modified average-cost method, are presented, and the modified average-cost methodology is described. The Health Technical Panel to the 1991 Advisory Council on Social Security concluded that both the present-value method and the modified average-cost method have value and should be reported.

Under the modified average-cost method which was used, prior to 1988, to evaluate the actuarial status of the program, the actuarial balance is defined as the difference between the arithmetic means of the annual cost rates (as defined in the "Actuarial Status of the Trust Fund" section) and the annual tax rates. Thus, under this method, the cost rates and tax rates for each year are given equal weights when summarized into a single measure. The annual cost rates include an amount to maintain the trust fund at a desired target level, if the fund would otherwise drop below that level. In years where the fund is at or exceeds the desired target level, no adjustment is made to lower the fund balance to the target level. In addition, the actuarial balances calculated under the modified average-cost method include the offset to cost due to the starting trust fund balance, and reflect the actual interest earned on the trust fund before it is exhausted.

The actuarial balance using the modified average-cost method can thus be characterized as being mathematically equivalent to the average tax rate increase needed to maintain the trust fund at the target level over the 75-year projection period, taking into account the beginning trust fund balance and the interest earnings of the trust fund. The implied funding pattern under the modified average-cost method is that the current law trust fund ratios are maintained until the trust fund ratio falls below the target amount (100 percent of the following year's estimated expenditures, in this year's report). After that, the tax rate is increased each year to cover the cost of the program and to maintain the trust fund at the target level.

The results of calculating the actuarial balance using the modified average-cost method are presented in Table B1. The assumptions used to calculate the results are the same as those presented throughout this report.

TABLE B1.--ACTUARIAL BALANCES OF THE HOSPITAL INSURANCE PROGRAM, UNDER ALTERNATIVE SETS OF ASSUMPTIONS (MODIFIED AVERAGE-COST METHOD)

	Alternative		
	I	II	III
1991-2015:			
Summarized tax rate 1/	2.90%	2.90%	2.90%
Summarized cost rate 2/	3.04	3.90	5.15
Actuarial balance 3/	-0.14	-1.00	-2.25
1991-2040:			
Summarized tax rate 1/	2.90	2.90	2.90
Summarized cost rate 2/	3.54	5.65	9.49
Actuarial balance 3/	-0.64	-2.75	-6.59
1991-2065:			
Summarized tax rate 1/	2.90	2.90	2.90
Summarized cost rate 2/	3.87	6.69	12.11
Actuarial balance 3/	-0.97	-3.79	-9.21

1/ As scheduled under present law.
2/ Expenditures for benefit payments and administrative costs for insured beneficiaries, on an incurred basis, expressed as a percentage of taxable payroll, computed on the modified average-cost basis, including the cost of maintaining the trust fund at a level of 100% of the following year's estimated expenditures, and including an offset to cost due to the beginning trust fund balance.
3/ Difference between the summarized tax rate (as scheduled under present law) and the summarized cost rate.

APPENDIX C

ANNOUNCEMENT OF THE MEDICARE PART A (HOSPITAL INSURANCE) INPATIENT HOSPITAL DEDUCTIBLE AND HOSPITAL AND SKILLED NURSING FACILITY COINSURANCE AMOUNTS, FOR CALENDAR YEAR 1991 1/

SUMMARY: This notice announces the inpatient hospital deductible and the hospital and skilled nursing facility coinsurance amounts for services furnished in calendar year 1991 under Medicare's hospital insurance program (Part A). The Medicare statute specifies the formulae to be used to determine these amounts.

The inpatient hospital deductible will be $628. The daily coinsurance amounts will be: (a) $157 for the 61st through 90th days of hospitalization in a benefit period; (b) $314 for lifetime reserve days; and (c) $78.50 for the 21st through 100th days of extended care services in a skilled nursing facility in a benefit period.

Effective Date: January 1, 1991.

SUPPLEMENTARY INFORMATION:

I. Background

Section 1813 of the Social Security Act (the Act) provides for an inpatient hospital deductible to be subtracted from the amount payable by Medicare for inpatient hospital services furnished to a beneficiary. It also provides for certain coinsurance amounts to be subtracted from the amounts payable by Medicare for inpatient hospital and extended care services. Section 1813(b)(2) of the Act requires the Secretary to determine and publish between September 1 and September 15 of each year the amount of the inpatient hospital deductible and the hospital and skilled nursing facility (SNF) coinsurance amounts applicable for services furnished in the following calendar year.

II. Computing the Inpatient Hospital Deductible for 1991

Section 1813(b) of the Act stipulates the method for computing the amount of the inpatient hospital deductible for any year, beginning with the deductible for 1989. The inpatient hospital deductible is an amount equal to the inpatient hospital deductible for the preceding calendar year, changed by the Secretary's best estimate of the payment-weighted average of the applicable percentage increases (as defined in section 1886(b)(3)(B) of the Act) used for updating the payment rates to hospitals for discharges in the fiscal year (FY) that begins on October 1 of the same preceding calendar year, and adjusted to reflect real case mix. The adjustment to reflect real case mix is determined on the basis of the most recent case mix data available. The amount determined under the formula is rounded to the nearest multiple of $4 (or, if midway between two multiples of $4, to the next higher multiple of $4).

1/ Extracted from the notice entitled "Medicare Program; Inpatient Hospital Deductible and Hospital and Skilled Nursing Facility Coinsurance Amounts for 1991," which was published in the Federal Register on November 1, 1990 (Vol. 55, No. 212, pp. 46104-46105).

For FY 1991, section 1886(b)(3)(B) of the Act provides that the applicable percentage increase for all hospitals is the market basket percentage increase. This increase, for FY 1991, is 5.2 percent, as announced in the **Federal Register** on September 4, 1990 (55 FR 35990). Thus, the Secretary's best estimate of the payment-weighted average of the increases in the payment rates for FY 1991 is also 5.2 percent. We recognize that Congress has frequently revised the payment rate increase provisions found in section 1886(b)(3)(B) of the Act during the budget reconciliation process, subsequent to the determination and promulgation of the deductible. Such revisions may occur this year as well and may affect the FY 1991 payment rate increase. However, at the time of this determination, we must use the payment rate increase specified in current law to determine the 1991 deductible.

To develop the adjustment for real case mix, an average case mix was first calculated for each hospital that reflects the relative costliness of that hospital's mix of cases compared to that of other hospitals. We then computed the increase in average case mix for hospitals paid under the Medicare prospective payment system in FY 1990 compared to FY 1989. (Hospitals excluded from the prospective payment system were excluded from this calculation since their payments are based on reasonable costs and are affected only by real increases in case mix.) We used bills from prospective payment hospitals received in HCFA as of the end of July 1990. These bills represent a total of about 7.0 million discharges for FY 1990 and provide the most recent case mix data available at this time. Based on these bills, the increase in average case mix in FY 1990 is 0.33 percent. However, since the diagnosis-related group (DRG) relative weights were reduced by 1.22 percent for FY 1990, the 0.33 percent increase in average case mix must be adjusted upward by 1.22 percent, yielding the effective average case mix increase of 1.55 percent for FY 1990.

Although average case mix has increased by 1.55 percent in FY 1990, section 1813 of the Act requires that the inpatient hospital deductible be increased only by that portion of the case mix increase that is determined to be real. We estimate that the increase in real case mix is about 1 percent. This is based on a study performed by the RAND Corporation which disaggregated the case mix increase in FY 1987 into its components. The RAND study found that about two-thirds of the increase in case mix in FY 1987 was for real changes in case mix severity. Consequently, we estimate that 1 percent of the increase, which is about two-thirds of the 1.55 percent increase for FY 1990, is due to real case mix changes.

Thus, the estimate of the payment-weighted average of the applicable percentage increases used for updating the payment rates is 5.2 percent, and the real case mix adjustment factor for the deductible is 1.0 percent. Therefore, under the statutory formula, the inpatient hospital deductible for services furnished in calendar year 1991 is $628. This deductible amount is determined by multiplying $592 (the inpatient hospital deductible for 1990) by the payment rate increase of 1.052 multiplied by the increase in average real case mix of 1.01, which equals $629.01 and is rounded to $628.

III. Computing the Inpatient Hospital and Skilled Nursing Facility Coinsurance Amounts for 1991

The coinsurance amounts provided for in section 1813 of the Act are defined as fixed percentages of the inpatient hospital deductible for services furnished in the same calendar year. Thus, the increase in the deductible generates increases in the coinsurance amounts. For inpatient hospital and extended care services furnished in 1991, in accordance

with the fixed percentages defined in the law, the daily coinsurance for the 61st through 90th days of hospitalization in a benefit period will be $157 (1/4 of the inpatient hospital deductible); the daily coinsurance for lifetime reserve days will be $314 (1/2 of the inpatient hospital deductible); and the daily coinsurance for the 21st through 100th days of extended care services in a SNF in a benefit period will be $78.50 (1/8 of the inpatient hospital deductible).

IV. Cost to Beneficiaries

We estimate that in 1991 there will be about 8.1 million deductibles paid at $628 each, about 3.1 million days subject to coinsurance at $157 per day (for hospital days 61 through 90), about 1.2 million lifetime reserve days subject to coinsurance at $314 per day, and about 6.7 million extended care days subject to coinsurance at $78.50 per day. Similarly, we estimate that in 1990 there will be about 7.8 million deductibles paid at $592 each, about 3.0 million days subject to coinsurance at $148 per day (for hospital days 61 through 90), about 1.2 million lifetime reserve days subject to coinsurance at $296 per day, and about 8.9 million extended care days subject to coinsurance at $74 per day. (The number of extended care days subject to coinsurance is expected to be higher in 1990 than in 1991 due to the "catastrophic transition" provisions of Public Law 101-234, which are in effect for 1990 but not for 1991.) Therefore, the estimated total increase in cost to beneficiaries is about $400 million (rounded to the nearest $10 million), due to (1) the increase in the deductible and coinsurance amounts and (2) the change in the number of deductibles and daily coinsurance amounts paid.

V. Regulatory Impact Statement

This notice merely announces amounts required by legislation. This notice is not a proposed rule or a final rule issued after a proposal and does not alter any regulation or policy. Therefore, we have determined, and the Secretary certifies, that no analyses are required under Executive Order 12291, the Regulatory Flexibility Act (5 U.S.C. 601 through 612), or section 1102(b) of the Act.

Dated: September 28, 1990.

Gail R. Wilensky,
Administrator,
Health Care Financing Administration

Approved: October 15, 1990.

Louis W. Sullivan,
Secretary,
Department of Health and Human Services

APPENDIX D

ANNOUNCEMENT OF THE MEDICARE PART A (HOSPITAL INSURANCE) MONTHLY PREMIUM RATE FOR THE UNINSURED AGED, FOR CALENDAR YEAR 1991 1/

SUMMARY: This notice announces the hospital insurance premium for the uninsured aged for calendar year 1991 under Medicare's hospital insurance program (Part A). The monthly Medicare Part A premium for the 12 months beginning January 1, 1991 for individuals who are not insured under the Social Security or Railroad Retirement Acts and do not otherwise meet the requirements for entitlement to Part A is $177. Section 1818(d) of the Social Security Act specifies the method to be used to determine this amount.

Effective Date: January 1, 1991.

SUPPLEMENTARY INFORMATION:

I. Background

Section 1818 of the Social Security Act (the Act) provides for voluntary enrollment in the Medicare hospital insurance program (Medicare Part A), subject to payment of a monthly premium, of certain persons age 65 and older who are uninsured for social security or railroad retirement benefits and do not otherwise meet the requirements for entitlement to Part A. (Persons insured under the Social Security or Railroad Retirement Acts need not pay premiums for hospital insurance.)

Section 1818(d)(2) of the Act, as amended by section 103 of the Medicare Catastrophic Coverage Act of 1988 (Pub. L. 100-360, enacted on July 1, 1988), requires the Secretary to determine and publish, during September of each calendar year, the amount of the monthly premium for the following calendar year for persons who voluntarily enroll in Medicare Part A.

Section 1818(d) of the Act, as amended by section 103 of Public Law 100-360, requires the Secretary to estimate, on an average per capita basis, the amount to be paid from the Federal Hospital Insurance Trust Fund for services performed and for related administrative costs incurred in the following year with respect to individuals age 65 and over who will be entitled to benefits under Part A. The Secretary must then, during September of each year, determine the monthly actuarial rate (the per capita amount estimated above divided by 12) and publish the dollar amount to be applicable for the monthly premium in the succeeding year. If the premium is not a multiple of $1.00, the premium is rounded to the nearest multiple of $1.00 (or if it is a multiple of 50 cents but not of $1.00, it is rounded to the next highest $1.00). The 1990 premium under this method was $175 and was effective January 1990. (See 54 FR 48322; November 22, 1989.)

1/ Extracted from the notice entitled "Medicare Program; Part A Premium for the Uninsured Aged for 1991," which was published in the Federal Register on October 12, 1990,(Vol. 55, No. 198, pp. 41603-41604).

II. Premium Amount for 1991

Under the authority of section 1818(d)(2) of the Act (42 U.S.C. 1395i-2(d)(2)), the Secretary has determined that the monthly Medicare Part A hospital insurance premium for the uninsured aged for the 12 months beginning January 1, 1991 is $177.

III. Statement of Actuarial Assumptions and Bases Employed in Determining the Monthly Premium Rate

As discussed in section I of this notice, the monthly premium for the uninsured aged for 1991 is equal to the estimated monthly actuarial rate for 1991 rounded to the nearest multiple of $1. The monthly actuarial rate is defined to be one-twelfth of the average per capita amount that the Secretary estimates will be paid from the Federal Hospital Insurance Trust Fund for services performed and related administrative costs incurred in 1991 for individuals age 65 and over who will be entitled to benefits under the hospital insurance program. Thus, the number of individuals age 65 and over who will be entitled to hospital insurance benefits and the costs incurred on behalf of these beneficiaries must be projected to determine the premium rate.

The principal steps involved in projecting the future costs of the hospital insurance program are (a) establishing the present cost of services provided to beneficiaries, by type of service, to serve as a projection base; (b) projecting increases in payment amounts for each of the various service types; and (c) projecting increases in administrative costs. Establishing historical Part A enrollment and projecting future enrollment, by type of beneficiary, is part of this process.

We have completed all of the above steps, basing our projections for 1991 on (a) current historical data and (b) projection assumptions under current law from the Midsession Review of the President's Fiscal Year 1991 Budget. It is estimated that in calendar year 1991, 30.586 million people age 65 and over will be entitled to Part A benefits (without premium payment), and that these individuals will, in 1991, incur $65.048 billion of benefits for services performed and related administrative costs. Thus, the estimated monthly average per capita amount is $177.23 and the monthly premium is $177.

IV. Costs to Beneficiaries

The 1991 Part A premium is about 1 percent higher than the $175 monthly premium amount for the 12-month period beginning January 1, 1990. This increase results from the recalculation of the monthly actuarial rate described in section III of this notice. The increase is small because the premium for 1990 included estimated costs expected to be incurred in 1990 under Public Law 100-360, while the premium for 1991 does not include such costs. (The premium amount for each year is set prospectively, in the manner required by law, based on the law in place at the time of its determination. Although the Medicare Catastrophic Coverage Repeal Act of 1989 (Pub. L. 101-234, enacted on December 13, 1989), which repealed most of the cost-producing provisions of Public Law 100-360, was enacted before the start of calendar year 1990, Public Law 100-360 was in place when the 1990 premium was determined and promulgated.)

We estimate that there are, as of July 1,1990, approximately 63 thousand enrollees who are voluntarily enrolled in Medicare's hospital insurance program (Part A) by paying the premium, who do not otherwise meet the requirements for entitlement. The estimated cost of the increase in the premium to these enrollees will be about $1.5 million. However,

as a result of section 6013 of the Omnibus Budget Reconciliation Act of 1989 (Pub. L. 101-239, enacted on December 19, 1989), "Buy-In Under Part A for Qualified Medicare Beneficiaries," we expect, based on preliminary data, that approximately 200 thousand individuals who do not otherwise meet the requirements for entitlement and who are not currently enrolled will be enrolling in Medicare's hospital insurance program by premium payment (with payment of the premium being made by the States).

V. Regulatory Impact Statement

This notice merely announces amounts required by legislation. This notice is not a proposed rule or a final rule issued after a proposal, and does not alter any regulation or policy. Therefore, we have determined, and the Secretary certifies, that no analyses are required under Executive Order 12291, the Regulatory Flexibility Act (5 U.S.C. 601 through 612) or section 1102(b) of the Act.

Dated: September 24, 1990.

Gail R. Wilensky,
Administrator,
Health Care Financing Administration

Approved: September 27, 1990.

Louis W. Sullivan,
Secretary,
Department of Health and Human Services

APPENDIX E

STATEMENT OF ACTUARIAL OPINION

Subject to the comments noted below, it is my opinion that (1) the methodology used herein is based upon sound principles of actuarial practice and (2) the assumptions used and the resulting cost estimates are, in the aggregate, reasonable for the purpose of evaluating the actuarial and financial status of the Federal Hospital Insurance Trust Fund, taking into account the experience and expectations of the program.

Appendix B summarizes the long-range actuarial status of the HI program using the modified average-cost method. Because this method is consistent with the trust fund projections, particularly with regard to the recognition of interest credited to the trust fund, I consider it to be the appropriate method for summarizing the long-range actuarial status of the program.

There has been virtually no net increase in real earnings during the last 22 years. In my opinion, projected real earnings assumptions that are more consistent with historical experience would be more appropriate than the assumptions adopted by the Trustees.

Roland E. King
Fellow of the Society of Actuaries
Member of the American Academy of Actuaries
Chief Actuary,
Health Care Financing Administration

APPENDIX F

STATEMENT OF PUBLIC TRUSTEES ON QUALIFIED ACTUARIAL OPINION IN THE HOSPITAL INSURANCE (HI) REPORT

The Social Security Act requires that the annual report of the Board of Trustees on the operation and status of the Federal Hospital Insurance (HI) Trust Fund include "an actuarial opinion by the Chief Actuarial Officer of the Health Care Financing Administration (HCFA) certifying that the techniques and methodologies used are generally accepted within the actuarial profession and that the assumptions and cost estimates used are reasonable." The HCFA Chief Actuary has qualified his actuarial opinion in this year's HI report as a result of (1) an aspect of the methodology; and (2) the real-wage gain assumptions approved and used by the Board of Trustees in this year's report.

This year's actuarial opinion suggests that the present-value method of measuring the financial condition of the HI trust fund approved by the Board of Trustees produces inaccurate and inappropriate results. The HCFA Chief Actuary apparently believes that the modified average-cost method is the only method that produces accurate results for the HI program.

After extensive examination and consultation on this issue, we believe that at the present time the present-value method is generally accepted within the actuarial profession, and thus meets the requirements of the law for actuarial certification. Further, we understand that the present-value method is generally preferred over the modified average-cost method for presenting long-range figures such as those used in the HI report for the 75-year valuation period.

We note that the SSA Chief Actuary based his opinion in this year's Old-Age, Survivors, and Disability Insurance (OASDI) annual report on the same underlying economic, including real-wage gain, and demographic assumptions, and on the same present-value method, that are used in the HI report. We also note that the Health Technical Panel Report to the 1991 Advisory Council on Social Security stated that the use of "present value calculations based on projected interest rates to summarize cash flows over an extended period of time is well established within the actuarial, economics, and finance literature." This comment specifically refers to use of the present-value method in the HI annual report and serves as a clear indication that the present-value method is generally accepted within the actuarial profession.

In addition, a recommendation made by the Social Security Technical Panel Report to the 1991 Advisory Council on Social Security stated that the summary measure of actuarial balance should continue to be used and should continue "to be based on the present-value method of summarizing income and cost rates... ." Further, an expert Working Group concerned with trust fund measurement convened by the two former public trustees "concluded that the present-value method used to calculate the actuarial balance in the OASDI programs is appropriate and should be used for evaluating the HI program." Accordingly, we believe the opinion qualification based on methodology by the HCFA Chief Actuary represents an expression of a professional preference outside of the bounds of the legally required actuarial opinion.

The HI actuarial opinion also includes a qualification regarding the real-wage gain assumptions used in this year's HI report. The HCFA Chief Actuary included this qualification based on his belief that the real-wage growth assumptions are more optimistic than is warranted based on his analysis of certain historical data. We recognize that there is room for reasonable people to disagree over the individual assumptions used for calculating the actuarial status of the trust fund. We also believe that individual assumptions should be adjusted periodically to reflect more recent information and changing conditions. In this regard, we note that the real-wage gain assumptions used in this year's report are lower than those used in last year's report.

We believe that the purpose of the actuarial certification is not to indicate whether the individual assumptions used are those preferred by any one participant in the process (i.e., the HCFA Chief Actuary), but rather to indicate whether all of the required assumptions when considered as a whole are reasonable in the aggregate. The HCFA Chief Actuary asserts in the actuarial opinion that lower real-wage gain assumptions would be more appropriate but does not make a persuasive case that the assumptions approved by the Trustees are not reasonable in the aggregate.

We believe the assumptions used in the HI report meet the statutory test for actuarial certification. Accordingly, we believe that the comment on real-wage gains by the HCFA Chief Actuary also represent an expression of a preference outside the bounds of the legally required actuarial opinion.

We are not actuaries and do not presume to speak as actuarial experts. Rather, as public trustees, our role is to review the methodology, assumptions, data, estimates, and all other information contained in the HI report as representatives of the public to determine if it clearly, fully, fairly, and accurately presents the current and projected financial condition of the HI trust fund.

We have taken great care to review this year's HI annual report. We have closely examined and seriously considered the comments noted in the actuarial opinion and concluded that they are not persuasive and should not have resulted in a qualified actuarial opinion, based on the applicable statutory requirement. We respect the right of the HCFA Chief Actuary to express his professional views regarding any significant actuarial matters but regret that he, in our view, has improperly qualified his actuarial opinion. As a result, we are compelled to address the issues he has raised in order to avoid contributing to possible confusion or concern in the public about the fairness or accuracy of the HI report. We have, along with the other trustees and their expert staffs, studied and discussed all of the methodologies and assumptions used in arriving at the estimates, and we have concluded that they are reasonable under present circumstances. Accordingly, we have endorsed the HI report and signed it with the other trustees for transmission to the Congress and the public whom we represent.

Stanford G. Ross
Trustee

David M. Walker
Trustee